ENGINEERING NEWS-RECORD

INDEX

VOLUME 150 JANUARY-JUNE, 1953

A

Aeronautics

Air Force counters charges of extravagant construction .....Jan. 8 26
Air research projects.....Apr. 30 22
Airports
Air Force postponing work at 14 bases .....May 21(F)21
Air Force program will begin soon .....Feb. 5 23
Alaska airbase jobs.....May 21 45
Australia designs airport to guard against jet blasts.....June 4 *71
Buffalo to expand present terminal .....June 18 48
Canada—Edmonton supply base in construction .....Apr. 9 25
Cleveland may have airport on the bottom of Lake Erie.....Apr. 2 50
Dallas voters approve Love Field bond issue .....Feb. 5 126
Denver airport plan financed by revenue bonds .....Jan. 1 (F) *57
Detroit-Wayne airport paving (unit prices) .....June 25 77
Federal aid cut.....May 7 27
Fort Worth, Tex. Amon Carter field started .....June 18 48
France—U. S. bases require 2 or 3 more years .....Feb. 5 28
Great Britain, London—completes new terminal in time for Coronation traffic .....June 18 *57
Great Britain—London concrete hangar .....May 28 (F) *68
Greenland—Thule construction sets safety record .....Feb. 12 30
Hangars
England—aluminum trusses carry hangar roof .....Mar. 12 *66
Joint Construction Agency—new command post for military construction in France. W. G. Bowman .....June 11 (F) *33
Jet propelled planes call for different design ASCE meeting.....Mar. 12 24
Lake Charles Air Force base, La. (unit prices) .....Jan. 8 92
Limits needed for airports....May 7 e128
Lincoln, Neb. airfield pavement vibrated full-depth .....June 18 *39
Long—Morse and other critical reports spur review of defense construction .....Feb. 26 22
Los Angeles air base bids asked .....Feb. 26 23
Los Angeles airport meets defeat .....June 11 47
Los Angeles International Airport has highway tunnels under runways .....Jan. 8 *54
Manhattan, Kansas, runway extensions (unit prices) .....Jan. 1 56
Mexico City modern airlines terminal .....Apr. 2 *43
Nashville air base picketing halted by temporary injunction...Feb. 12 30
New Orleans Airport will build new hangars .....Mar. 26 (F) *52
Oakland, Calif. airport improvement awaits voters' approval....Feb. 19 222
Oakland, Calif. planning airport .....June 18 48
Oceana, Va. jet base development .....Feb. 26 27
Philadelphia airport work criticized .....Feb. 12 63
Philippine Is. Luzon—U. S. Seabees building air base and runway .....June 11 56
Portland, Me. to enlarge airport .....May 21 54
St Louis terminal building bids sought .....Jan. 29 *52
St Paul, Minn. authorized to issue bonds for improvements....May 21 51
St Paul—Minneapolis plans to expand airport .....Mar. 26 (F) 52
San Antonio gets new building .....Apr. 30 *45
Spain: next stop for U. S. airbase builders? W. G. Bowman .....May 14 (F) *33
Techniques and trends in transportation .....Feb. 19 (F) *120
Toledo financing plan faces legal obstacle .....Jan. 29 83
Toledo to construct airport..June 18 48
Tucson, Ariz. tries taxiway using coal tar-synthetic rubber binder .....Apr. 23 26
Washington, D. C. Andrews Field—Joint civilian military use agreed .....June 4 27
Baltimore plans harbor-side heliport .....Jan. 22 *51
Baltimore plant of Glenn L. Martin—beams prestressed for fast erection of mezzanine F. W. Wilcox .....June 18 (F) *32
Cuyahoga Falls, Ohio—Air Force orders Aluminum Co. to build defense plant .....Apr. 16 26
Cuyahoga Heights, Ohio, holds up construction of Air Force forging plant .....Apr. 16 66
Heliport planning needed.....Mar. 5 e124
Japan—Tokyo aviation center..Jan. 15 79
London heliport .....Jan. 15 79
Tullahoma, Tenn. research center puts in giant rotor .....June 25 *30
Tullahoma, Tenn. supersonic test center for Air Force.....Apr. 30 (F) *30
Tullahoma, Tenn. supersonic test center's wind tunnel's motors placed .....June 11 26

Air Conditioning

Clay pipe ducts for air conditioning restaurants being built along the Pennsylvania Turnpike .....Jan. 15 *45
Dallas planning three air-conditioned shopping centers .....Feb. 12 (F) *44
Ground water supplies said to be unaffected by cooling water.....Mar. 26 43
Houston, Tex.—Melrose Building's concrete canopies reduce operating costs for air conditioning.....Jan. 8 *54
Phoenix debates measures for air-cooling services .....May 14 73
Trane Co Laboratory to study weather "magic" .....Jan. 1 37
Tullohoma supersonic test center will require giant cooling system..Apr. 30 (F) *32
Air pollution — Oregon gives attention to air pollution.....Mar. 19 46

Alaska

Eklutna power availability may change city's plans .....Jan. 22 50
Opportunity in Alaska.....Jan. 15 e164

Aluminum

Harvey Machine Co. plans primary reduction plant at the Dalles, Ore. .....Jan. 29 23
Wheland Co. enters field as fourth producer .....Feb. 5 124
American Academy of Sanitary Engineers
ASCE sanitary engineers meet to consider the organization.....Mar. 12 28
A. F. Meyer Jr. .....May 21 10
Do we need an AASE?.....Mar. 5 e124
American Concrete Institute Convention in Boston .....Feb. 26 25
American Concrete Pipe Assn. meeting .....Mar. 5 23
American Institute of Architects
Architects need broader background for mass-housing design, meeting is told .....June 25 *25
American Institute of Steel Construction
National Engineering Conference .....Apr. 30 25
American Power Conference in Chicago .....Apr. 2 27
American Road Builders Assn. meets in Boston .....Feb. 19 (F) *45
American Society of Civil Engineers
Miami Beach meeting.....June 25 26
Revises method of distributing papers .....Mar. 18 27
San Francisco meeting....Mar. 12 (F) 23
American Society of Photogrammetry elects head .....Jan. 29 *58
American Water Works Assn.
M. B. Cunningham to be president .....May 7 *62
Grand Rapids, Mich. convention R. J. Fox Jr. .....May 21 (F) *23
New York meeting features finance problem .....Jan. 29 81

Aqueducts

Hetch Hetchy Aqueduct—San Francisco water lines completed (map) .....Jan. 8 (F) *46
Segovia Aqueduct in Spain....May 14 *35

Architects

AIA meeting told that architects need broader background for mass-housing design .....June 25 *25
Connecticut revises architect registration law .....June 11 26
Tennessee court refuses to differentiate between architects and engineers .....Jan. 15 26
ethics, not law.....Jan. 29 e108
Associated Generals Contractors
Seeks new procedures in government contracting R. H. Dodds..Apr. 2 (F) *23
Association of Highway Officials of the North Atlantic States meet....Mar. 12 27

Atomic Energy

Atom bombs
Atomic test on wood—frame houses, L. L. Wise.....Mar. 26 (F) 23 e176
H-bomb explosion effects on buildings studied by Stanford researchers .....Feb. 5 *84
Atomic lab at Garden City, N. Y. started by William Collins of Kidde Constructors .....Apr. 16 (F) *156
Commercial development of atomic power .....Apr. 16 e184
Feasibility of atomic power plants established by industrial surveys .....June 4 (F) 26
Model of proposed atomic power pilot plant .....June 4 *26

* Illustrated; e, editorials; (F) Articles over a page

Atomic Energy Commission

A-plant strikes ..... Mar. 19 30
Atomic energy is now the largest new employer of scientists and engineers ..... Jan. 29 27
Atomic Energy Labor Relations Panel reorganized ..... Mar. 19 29
..... Apr. 2 29
Atomic test on wood-frame houses L. L. Wise ..... Mar. 26 (F) *23 e176
Brookhaven National Laboratory—generator foundation for cosmotron meets unique requirements J. M. Ruddy ..... Mar. 26 (F) *44
Construction force declines ... Jan. 22 32
Illinois plant near Macomb to start this spring (map) ..... Feb. 5 *125
Labor-Management Relations Panel headed by Ching ..... June 18 *31
No easy economy target ..... May 21 21
Oak Ridge private housing boosted ..... Jan. 29 79
Oak Ridge slowed by operating engineers walkout ..... Feb. 5 30
Ohio's Pike County atomic energy plant needs funds from government for highways ..... Feb. 12 28
Ohio strike ended by four-point plan ..... Feb. 5 30; Feb. 19 227
Ohio Valley Electric Corp. announces contract awards ..... Feb. 12 60
Paducah, Ky. A-plant constructor gets safety commendation ..... Mar. 5 29
Paducah, Ky. operating engineers' feud is aired ..... May 21 31
Paducah teamsters end walkout ..... Feb. 5 30
Portsmouth, Ohio: Cheshire, Ohio or Madison, Ind? A-plants may avoid labor pinch ..... Jan. 22 32
Portsmouth, Ohio, subcontract let ..... Feb. 19 270
Puerto Rico wants atomic power ..... Mar. 26 87
Savannah River H-bomb project-construction firm sued over joint venture agreement ..... Apr. 16 22
Savannah River plant strike ends ..... Feb. 26 29
Sphere houses atomic submarine. May 14 *96
Sphere is atomic submarine laboratory ..... Apr. 9 (F) *32
sphere foundation D. A. Werblin ..... Apr. 9 (F) *33
Wage increases since wage control end (table) ..... Apr. 16 31
Auditoriums see Stadiums
Automobile test track being constructed near Detroit ..... Mar. 5 *42

B

Barracks see Housing
Beach protection see Shore protection

Beams

Against partial prestress A. M. Lount ..... Jan. 15 10
Cold-worked bars in beams N. L. Ashton ..... Jan. 15 10
Continuous-beam design variation George Winter ..... Apr. 30 10
R. W. Waterhouse ..... June 11 10
Continuous-beam design variation cuts frame cost in Fairbanks, Alaska, warehouse R. W. Waterhouse ..... Mar. 26 *45
Flames bent beams and flames correct deflection ..... Mar 12 *34 e132

Blasting

Euclid, Ohio, authorizes mining equipment to speed underground blasting ..... Apr. 2 50
Euclid, Ohio, city council stops contractor from blasting in sewer job ..... Jan. 29 50
Bock, Carl A. named to head hydro authority ..... May 7 *64

Bonds

Bond decline boosts money costs ..... Apr. 9 102
California sells $100-million bond issue ..... Feb. 12 62
Louisville, Ky. would use revenue bonds to help school ..... Mar. 19 103
New Jersey Authorities' bond selling under fire in courts ..... Feb. 12 62
New York City now requires contract bonds ..... Feb. 19 (F) *220
Prices drop so low that the Federal Reserve moves in ..... June 11 104
State and municipal bond sales for new construction 1951, 1952 (table) ..... Feb. 19 55

Book Reviews

Advanced mechanics of materials Seely & Smith ..... Mar. 19 74
Channelization: the design of highway intersections at grade Highway Research Board ..... June 4 94
Civil and structural design ... May 21 79
Elasticity in engineering E. E. Sechler ..... Mar. 12 85
Engineering in public health H. E. Babbitt ..... Jan. 15 88
Estimating construction costs R. L. Peurifoy ..... May 21 79
Fatigue and fracture of metals ed by W. M. Murray ..... Mar. 19 76
Foundation engineering Peck, Hanson & Thornburn ..... June 11 69
Handbook of applied hydraulics C. V. Davis ..... Mar. 26 105
How to improve the utilization of engineering manpower ..... Jan. 8 79
Industrial waste treatment E. B. Besselievre ..... Jan. 15 88
Manual of photogrammetry Amer. Soc. of Photogrammetry ..... June 11 69
Public roads of the past: 3500 B. C. to 1800 A. D. A. C. Ros ..... Jan. 22 62
Reclamation in the U. S. A. R. Golze ..... June 4 94
Roche estimating methods W. E. Roche ..... May 21 79
Sanitary landfill method of refuse disposal in Northern States ..... Apr. 16 102
Sherlock's bluebook of electrical estimating ..... May 21 79
Statistically indeterminate structures Paul Andersen ..... Mar. 26 109
Statically indeterminate structures Chu-Kai Wang ..... Mar. 26 109
Streamlined specifications standards B. J. Small ..... Mar. 26 105
Theory of elasticity and plasticity H. M. Westergaard ..... Mar. 12 85
U. S. 40: cross section of the United States ..... May 14 103
Water quality criteria—California's Water Pollution Control Board ..... Apr. 16 102
Breakwaters—Tetrapod, jetty blocks, developed by French hydraulic laboratory ..... Jan. 8 (F) *32

Bridge Accidents and Failures

Oklahoma bridge collapses from overload ..... May 14 *26

Bridge Construction

Bailey bridge erected by officer candidate students ..... June 4 *46
Prestressing costs less D. H. Lee ..... Jan. 22 14
Pumice concrete precast for Idaho highway bridge ..... Apr. 9 *26
Railroad bridge swing pier repaired by "clamp-on" cofferdam ..... June 11 *43
Steel executive reports bridge building boom ..... May 14 27
Stockholm, Sweden, deep caissons stabilize weak bank spanned by new bridge ..... Jan. 22 (F) *41
Sweden reinforces concrete bridges with ring-and-wedge anchored bars Ake Holmberg ..... May 7 (F) *57
Tampa Bay Bridge superstructure concreting offsite cuts open-water hazards ..... Feb. 26 (F) *36
Tampa Bay Bridge—superstructure prestressed beams made in factory ..... Feb. 26 (F) *37
Techniques and trends in transportation ..... Feb. 19 (F) *120

Bridge Design

African bridge has precast elements for stability when bridge is submerged ..... June 25 (F) *53
Arch bridge, Brazil, with the longest span in the Western Hemisphere Antonio Froes, Jr. ..... Mar. 5 (F) *55
Bologna, Italy, footbridge supported by one prestressed girder only ... Jan. 29 *57
Chicago bascule bridge planned for Halsted Street ..... Jan. 1 *42
Concrete arch bridges of most daring design (table) ..... May 5 56
France—Rouen bridge utilizes welded box girders ..... Mar. 12 (F) *42
French highway bridge, a reinforced concrete cantilever span held by concrete pins and rockers ... Apr. 9 (F) *59
Kansas City's Paseo toll bridge will be self-anchored and founded on piers sunk as concrete caissons ..... Apr. 16 (F) *35
Low cost concrete bridge has simply supported steel span H. M. Hadley ..... May 14 *58
Pennsylvania highway engineer tells how prestressing has grown on state jobs ..... Jan. 15 (F) *35
Prestressed bridge to carry heavy logging traffic ..... Apr. 16 *40
H. M. Hadley ..... May 21 7
San Francisco-Golden Gate bridge—engineer board recommends addition of bottom lateral bracing to resist wind vibration ..... Jan. 22 22
Suspension
El Salvador bridge stiffened by diagonal cables Blair Birdsall ..... May 21 (F) *32
Mackinac Straits, Mich. project ..... Mar. 12 (F) *25
Tappan Zee Bridge to carry the New York Thruway has cantilever trusses, attracts two bidders (map) ... Apr. 23 *25
Wind loadings need revision—ASCE meeting ..... Mar. 12 24

Bridges

Africa
Orange River bridge—precast shells of structural elements for stability when submerged .... June 25 (F) *53
Akron
Expressway bridge to be erected ..... Apr. 16 66
Baltimore
Railroad bridge swing pier repaired by "clamp-on" cofferdam ... June 11 *43
Brazil
Concrete arch bridge with the longest span in Western Hemisphere. Anthony Froes, Jr. ..... Mar. 5 (F) *55
Chamberlain, S. D.
Replacing bridge near Fort Randall Dam ..... Apr. 2 *27
Chesapeake Bay Bridge
Quicker cable-strand erection method Blair Birdsall ..... Jan. 8 (F) *43
Chicago
Halsted Street bascule bridge planned ..... Jan. 1 *42
Colombia
Three suspension bridges constructed for highways ..... Jan 29 57
Cuyahoga River, Cleveland
Improvements program progresses through the years (map) ... Jan. 22 *47
Delaware River
Plan bridge to link New Jersey and Pennsylvania Turnpikes ... Mar. 12 *105
El Salvador
Cable-stiffened suspension bridge Blair Birdsall ..... May 21 (F) *32
Suspension bridge anchorage excavation aided by wellpoints B. J. Prugh ..... May 21 (F) *39
Formosa
Cho-Shui-Chi River bridge .. Mar. 12 *69
France
Paris—reinforced concrete cantilever span held by concrete pins and rockers ..... Apr. 9 (F) *59
Rouen bridge utilizes welded box girders ..... Mar. 12 (F) *42
Seine River bridge—cable trusses prestress bridge ..... Apr. 30 (F) *50
Georgia
Bridge Authority bill passes lower house ..... Feb. 12 62
Two bridge authorities begin work ..... Apr. 30 23
Great Britain
North Devon prestressed bridge uses precast elements ..... Apr. 16 *77
Hampton Roads
Bridge-tunnel project approved by Army ..... Apr. 16 23
Tunnel-bridge alternate route proposed ..... Feb. 26 46
Hawaii
Bridge built before waterway is dug ..... Jan. 15 *56
Idaho
Highway bridge built of precast pumice concrete ..... Apr. 9 *26
Italy
Bologna footbridge supported by one prestressed girder only .... Jan. 29 *57
Jacksonville, Fla.
John E. Mathews bridge completed ..... Jan. 22 50
Kansas City
Paseo Bridge to be opened Feb. 19 222
Paseo toll bridge and expressway ..... Apr. 16 (F) *35
Lake Pontchartrain, La.
Causeway progress ..... Jan. 22 26
Lincoln, R. I.
Overpass (unit prices) ..... Feb. 12 59
Little Rock, Ark.
Main Street Bridge judged to be state property ..... Apr. 2 49
Mississippi River
Jacks lower highway bridge 80 ft for dismantling on bank of river ..... Jan. 22 (F) *44
Mt. Vernon, Ind.
Toll bridges (unit prices) ... Apr. 23 98
New Orleans
Bridge application under revision ..... Apr. 2 22
Bridge prospect advances ... Jan. 22 26
Channel pier objection renewed in Mississippi River span protest ..... June 25 28
New bridge will relieve traffic congestion ..... Mar. 19 51
Specifications revised ..... June 4 23
New York City
Manhattan Bridge reconstruction suggested ..... Apr. 16 24
Geo. Washington bridge, one of the city's "Seven Wonders" .. May 14 *47
Whitestone bridge being painted ..... June 25 *31

• Illustrated; e, editorials; (F) Articles over a page

New York State Thruway bridge
Tappan Zee bridge design attracts two bidders (map) ..... Apr. 23 *25
New Zealand
Auckland Harbor bridge contracts awarded ..... Jan. 15 *72
Newburgh-Beacon, N. Y.
Study to be made ..... Apr. 23 25
Ohio Turnpike
Bids received ..... Jan. 22 80
Granted access to land for building twin bridges ..... Jan. 15 24
Pennsylvania
Highway engineer tells how prestressing has grown on state jobs Feb. 15 (F) *35
Philadelphia
Delaware River Bridge toll boost proposed ..... Feb. 12 64
Highway bridge over Schuylkill River ..... June 11 48
Philadelphia-Gloucester
Philadelphia to New Jersey bridge costly ..... May 28 87
Suspension bridge bids asked June 11 *23
Pittsburgh
Sharpsburg-Etna area bridge planned Jan. 29 48
Rappahannock River, Va.
Highway bridge to be built .. May 28 26
Raritan River Bridge, N. J.
Parkway bridge (unit prices) Apr. 30 77
San Diego County, Calif.
Moving bridges to prevent flooding out ..... Jan. 15 *51
San Francisco
Army Street to Bay Farm Is., Alameda County bridge authorized ..... June 11 22
Richmond-San Rafael bridge (unit prices) ..... Jan. 15 130
Richmond-San Rafael Bridge bids in, bonds may snag .. Jan. 1 23; Jan. 8 102
Richmond-San Rafael bridge boosters hit new legal snags ..... Jan. 15 140
Richmond-San Rafael bridge contracts awarded ..... Mar. 5 24
Richmond-San Rafael bridge discussed at ASCE meeting .. Mar. 12 23
Richmond-San Rafael bridge survey platform ..... May 21 *25
Richmond-San Rafael bridge wins round to upset suit ..... Jan. 22 80
Richmond-San Rafael bridge work starts ..... Mar. 19 27
Two bridges sought for bay .. Apr. 9 25
San Francisco-Golden Gate
Engineer board recommends addition of bottom lateral bracing to resist wind vibration ..... Jan. 22 22
Strengthening program authorized Jan. 29 23
To replace bridge would cost more than double ..... Feb. 12 23
Seattle
Puget Sound crossing via Vashon Is. controversial ..... Jan. 22 53
Feb. 12 42
Puget Sound, Wash. plans for two bridge projects ..... June 4 53
Puget Sound proposed bridges to be studied (map) ..... Apr. 23 *54
Straits of Mackinac Bridge, Mich.
Bond issue is postponed ... June 25 25
Bond issue passed to Wall Street May 28 85
Contracts let for project. Mar. 12 (F) *25
Financing is feasible, says banker Jan. 22 81
Investors kill bridge plan .... Apr. 16 21
Prospects for bridge improve May 7 26
Senate ok's bridge bill ..... May 14 22
Sweden
Four concrete bridges reinforced with ring-and-wedge anchored bars Ake Holmberg ..... May 7 (F) *57
Stockholm bridge—deep caissons stabilize weak banks ..... Jan. 22 (F) *41
Tampa Bay, Fla.
Prestressed beams made in factory Feb. 26 (F) *37
Superstructure concreting off-site cuts open-water hazards Feb. 26 (F) *36
Tappan Zee Bridge, N. Y. see New York State Thruway Bridge
Tolls
Georgia, Montana, create toll bridge authorities ..... Mar. 5 26
Toll bridge authority considered by Montana ..... Jan. 29 23
Use of bridge tolls ..... Mar. 26 e176
Vancouver
Granville bridge ready for traffic Feb. 19 202
Vancouver-Portland
Financing bill passed ..... Apr. 16 22
Venezuela
Arch vs viaduct E. O. Williams, R. Shama ..... Jan. 1 10
Washington State
Low cost concrete bridge has simply supported steel span H. M. Hadley May 14 *58
Prestressed concrete bridge to carry logging traffic ..... Apr. 16 *46
Wheeler, S. D.
Missouri River bridge moved by tall towers on barges to Chamberlain, S. D. ..... June 11 *24
Building Accidents and Failures
Lodi, Calif. warehouse collapse—failure of prestressed concrete trusses investigated ..... May 28 *25

Building Construction

Beams prestressed for fast erection of mezzanine, Glenn L. Martin's Baltimore plant F. W. Wilcox June 18 (F) *32
Costs
Building costs stabilized .... Feb. 26 63
School building controversy flares in state of Washington .. Jan. 22 (F) *79
Will utility costs keep climbing in '53? ..... Apr. 2 90
Dallas, Tex. $85-million housing project under way in West Dallas Jan. 1 (F) *38
ENR survey shows scarcity of big-city office space ..... Mar. 19 (F) *24
M. H. Frincke correction ... Apr. 16 10
Felt roofing can be used as slab moisture seal ..... May 21 68
Ford Rotunda dome built on rotating jib ..... May 28 *31
Industrial building awards fall off but still exceed last year's rate (chart & table) ..... May 28 23
Industrial building booms in Gulf Coast legion ..... Jan. 15 (F) *136
Lake Erie area has more chemical plants ..... May 14 152
Long Beach low-cost warehouse with prestressed girders .... June 11 (F) *41
Long Island industry construction developed by contractors and regional association Arnold Smith May 14 (F) *62
Los Angeles Home Show draws 200,000 June 25 (F) *80
Massachusetts Public Building Commission reorganization report urged Apr. 16 26
Milan, Italy, constructing a 25-story skyscraper ..... Apr. 16 77
New York City school designs changed to save construction costs Mar. 26 (F) *38
Perlite concrete roof cast on metal lath, Brecksville, Ohio ..... May 21 *45
Prefabricated home factory turns out office building in California .. May 7 *25
Slab floor laying for basementless homes ..... May 21 71
Slabs cast on ground, then lifted into place for two new buildings .. Apr. 16 *39
Store Modernization Institute runs a show ..... June 18 *106
Tacoma, Wash. factory produces prestressed buildings ..... Mar. 19 (F) *31
Techniques and trends in buildings and grounds ..... Feb. 19 (F) *87
Tiltup method used to erect San Francisco warehouse in 11 days. Mar. 5 *41
Toledo school overcrowding may be relieved by purchase of prefabricated steel buildings ..... Mar. 12 64

Building Design

AISC engineering conference discusses current trends in industrial design Apr. 30 25
Arched Indian bungalow and Mexican gas station roof are unusual types of concrete arches ..... June 25 *57
Bartsville, Okla., tower to provide office, living space ..... June 4 *23
Boston's museum and planetarium built on old dam ..... Mar. 12 *31
Chicago bus terminal loads underground ..... Apr. 9 (F) *41
Earthquake resistant
California earthquake of July 1952 tested buildings constructed under the new code ..... Mar. 12 24
Flat-plate reinforced concrete office building in Washington, D. C. Jan. 8 (F) *36
Ford Motor Co.'s Research Center a showcase for glass, brick, lighting June 4 (F) *23
General Electric's Appliance Park plant will be big, flexible and efficient Linton & Nowell ..... June 25 (F) *32
Gunnison prefabricated house called the Talisman ..... Feb. 12 (F) *33
Huts left from World War II repaired and improved ..... Feb. 19 *213
IBM factory designed with services placed in central core Seelye & Throop ..... Feb. 12 (F) *37
Leaning Tower of Pisa—what might be done to save it C. B. Spencer Apr. 2 (F) *40
London hangar has concrete arches 90 feet wide ..... May 28 (F) *68
MIT auditorium has dome structure suported at three points .... May 7 *24
New York City may get new theaters in multi-purpose buildings Apr. 9 (F) *50
New York City school designs changed to save consfruction costs Mar. 26 (F) *38
Philadelphia gives row housing a new look with curved streets .... Mar. 19 *45
Prefabricated homes standards to be devised ..... Mar. 26 27
San Antonio, Tex. builder constructs flexible house ..... Jan. 1 *27
Slabs cast on ground, then lifted into place for two new buildings .. Apr. 16 *39
Sphere's designer, R. M. Dodds .. May 21 7
Sphere houses atomic submarine May 14 *46
Sphere is atomic submarine laboratory Apr. 9 (F) *32 sphere foundation W. A. Werblin ..... Apr. 9 (F) *33
Toledo—School overcrowding may be relieved by purchase of prefabricated steel buildings ..... Mar. 12 64
Tower to provide office, living space, Bartlesville, Okla. ..... June 4 *23
Tullahoma, Tenn. supersonic test center presents difficulties in power, water and noise ..... Apr. 30 (F) *30
Underground construction
Fire protection for underground shelter Horatio Bond ..... Mar. 19 11
Wind resistant
Experience with tornadoes, H. G. Gerdes ..... June 25 15
Resistance impractical ..... June 18 23
Small Homes Council reports that residential construction can be made resistant to tornado fringe effects ..... June 18 24
Worcester tornado deals heavy damage to all but rigid frame construction F. S. Merritt .. June 18 (F) *21
Windowless six-story radiological lab for the Navy ..... Apr. 2 (F) *36

Building Design see also Beams, Columns, Concrete, Girders, Heating & Ventilating, Roofs

Building Laws and Regulations

Building Officials Conference of America approves building code standards for plastics ..... Apr. 16 2
Houston rewrites building code .. June 25 50
Milwaukee classifies residential construction ..... Mar. 12 60
New York City Relaxes theater codes June 25 50
Theaters in multi-purpose buildings suggested ..... June 25 (F) *50
New York State code gaining favor in cities ..... Apr. 2 48
55 cities okay building code .. Feb. 26 47

Buildings

Alaska, Fairbanks
Warehouse structural-steel framing cost cut by a variation of continuous-beam design R. W. Waterhouse ..... Mar. 26 *45
Allentown, Pa.
Sandwich wall panels of precast concrete and cellular glass for small houses ..... Apr. 23 (F) *46
Australia
Melbourne to have stadium for Olympic games ..... Jan. 29 57
Baltimore
Glenn L. Martin plant constructed with beams prestressed F. W. Wilcox ..... June 18 (F) *32
One-roof shopping center planned Mar. 12 *57
State buildings to be erected on slum clearance site ..... Apr. 30 45
Barrington, Ill.
Pumping foam concrete into wall forms for small house panels Apr. 23 (F) *47
Bartlesville, Okla.
Tower to provide office, living space June 4 *23
Bay City, Mich.
Power plant site dewatered by electro-osmosis method .... Apr. 30 (F) *36
Blythe, Calif.
Pipeline compressor building—pile drivers used as contractors on sand foundations ..... June 25 *62
Boston
Big project—engineers appointed June 11 48
Museum and planetarium built on old dam ..... Mar. 12 *31
Syndicate buys rail yard to build center similar to Rockefeller Center ..... Mar. 5 (F) *45
Brecksville, Ohio
Perlite concrete roof cast on metal lath ..... May 21 *45
Bristol, Tenn.
Roof top entrance from employee parking areas ..... June 18 *44
Cambridge, Mass.
MIT auditorium has dome structure supported at three points .... May 7 *24
Camden, N. J.
Hotel near race track to be built June 11 48

* Illustrated; e, editorials; (F) Articles over a page

Chicago
Buses load underground in new terminal ..... Apr. 9 (F) *41
Cincinnati
Public Health Service—latest in lab buildings R. Raneri ..... June 18 *37
Cleveland
Proposed multi-million dollar project ..... June 4 (F) *48
Columbus, Ohio
Store and warehouse for Sears, Roebuck to be constructed .. Jan. 29 47
Three elevators make four in hospital ..... Mar. 5 42
Cuba
Havana plans nine-story office building ..... Feb. 26 48
Dallas, Tex.
Air-conditioned shopping centers planned ..... Feb. 12 (F) *44
Bank building frame warped by fire ..... Apr. 30 *24
Bank building progressing and office skyscraper also planned .... Jan. 22 28
Drive-in bank combined with parking garage ..... Apr. 23 *52
Drive-in bank and parking garage planned ..... Feb. 5 49
$35 million housing project. Jan. 1 (F) *38
Dearborn, Mich.
Ford Motor Co.'s Research Center a showcase for glass, brick, lighting ..... June 4 (F) *33
Ford Rotunda dome built on rotating jig ..... May 28 *31
Denver
Airport building constructed on bored caisson foundation ..... Jan. 1 (F) *57
Warehouse roof prestressed .. Mar. 26 *27
Detroit
Gratiot area to be redeveloped ..... Apr. 16 61 June 11 47
Water supply station—mystery of the restless substratum-projectile piledriving J. H. Thornley ..... Mar. 19 (F) *33
Duluth
University of Minnesota plans building program ..... Jan. 15 138
Fontana, Calif.
Kaiser Steel's plant and mine on West Coast (picture feature) ..... May 28 *36
Gardenia, Calif.
Minneapolis-Honeywell plant grading accomplished as a benefit performance ..... Apr. 30 *23
Great Britain
Westminister Abbey getting annex for coronation ..... May 21 *66
Guam
Quonset huts left from World War II repaired and improved .... Feb. 19 *213
Gulf Coast
Industrial building booms. Jan. 15 (F) *136
Guttenberg, N. J.
Low-rent housing project completed ..... Mar. 12 61
Holland
General Tire & Rubber Co. to build tire plant in Amsterdam ... Apr. 16 88
Houston, Tex.
Melrose Building uses concrete canopies above the windows .... Jan. 8 *64
10-story garage proposed ..... Mar. 26 *64
Texas A & M college building foundation excavated mostly by machine C. S. Adams ..... Apr. 16 *48
Israel
Hospital to be built in Raniat-Gan ..... Mar. 26 87
Italy
Leaning Tower of Pisa—what might be done to save it C. R. Spencer ..... Apr. 2 (F) *40
Milan skyscraper ..... Apr. 16 77
Milan warehouse with beamless thin-shell concrete roof ..... Jan. 1 *25
Japan
Office building ..... Jan. 22 *56
La Crosse, Wis.
Trane lab to study weather "magic" ..... Jan. 1 37
Lodi, Calif.
Failure of warehouse trussed probed ..... May 28 *25
Long Beach, Calif.
Low-cost warehouse with prestressed girders ..... June 11 (F) *41
Los Angeles
County cannot break contract for welfare building ..... Jan. 15 138
County studies lease-purchase plan for buildings ..... Jan. 15 141
Office building in construction ..... Mar. 19 *24
Louisville, Ky.
Garage prestressed waffle-slab roof lifted ..... May 21 *27
Garage to be cast in two sections, then lifted into position .... Apr. 16 *39
General Electric's Appliance Park plant will be big, flexible and efficient Linton & Nowell ..... June 25 (F) *32
Mexico
Fire damages skyscraper under construction ..... June 11 *39
Mexico City Modern airlines terminal building ..... Apr. 2 *43
Olympic sports stadium missing 40,000 seats ..... Apr. 2 *39
Miami, Fla.
Shopping center started ..... Apr. 2 *44
Middletown, Pa.
Zoning barrier cleared for Levitt's de luxe homes ..... Mar. 19 59
Minneapolis
University of Minnesota plans building program ..... Jan. 15 138
New Hyde Park, N. Y.
Experimental building bay has hyperbolic paraboloid roof of aluminum ..... Jan. 1 *25
New York City
Elmhurst Hospital—bigger soil-test plate permits bigger pressures under footings ..... Apr. 16 *51
Theaters in multi-purpose buildings suggested ..... Apr. 9 (F) *50
Throggs Neck houses .... June 4 (F) *36
United Nations buildings block no traffic ..... May 28 *46
Norfolk, Va.
Civic center planned ..... Feb. 5 *50
Oildale, Calif.
Factory turned out by prefabricated home factory ..... May 7 *25
Paoli, Pa.
Certainteed Products building—wrong architect J. C. Van Balen ..... Jan. 8 10
Philadelphia
Elgin garage gets two more levels ..... Feb. 5 *46
First big contract let for center ..... June 4 65
Pennsylvania Railroad plan similar to Rockefeller Center suggested for Broad Street Station ... Feb. 12 (F) *41
Pittsburgh
"Cultural center" planned .... Apr. 23 *49
Poughkeepsie, N. Y.
IBM factory designed with services placed in central core Seelye & Throop ..... Feb. 12 (F) *37
Princeton
Shopping center under construction ..... Apr. 2 *44
Raleigh, N. C.
Arena has saddle-shape roof hung from pair of concrete arches that encircle building F. S. Merritt ..... Feb. 5 (F) *31
Arena too elaborate? R. W. Powell ..... Mar. 9-11 design explained F. N. Severud ..... Mar. 26 10
Roosevelt Field, Long Is.
Now being developed as an industrial center ..... May 14 *46
St. Louis
Airport terminal building bids sought ..... Jan. 29 *52
St. Paul
University of Minnesota plans building program ..... Jan. 15 138
San Antonio
Airport terminal building .... Apr. 30 *45
Flexible house ..... Jan. 7 *27
Southwest Research Institute—floors and roof to be cast on slab, then jacked into place ..... Apr. 16 *39
San Francisco
Garage cables were in plastic tubes Robert Marx ..... Jan. 22 14
U. S. Navy's new radiological lab ..... Apr. 2 (F) *36
Warehouse erected in 11 days by using the tilt-up method .... Mar. 5 *41
Schenectady
Steel sphere is atomic submarine laboratory Apr. 9 (F) *32 sphere foundation D. A. Werblin Apr. 9 (F) *33
Steel spheres designer R. M. Dodds ..... May 21 7
Steel sphere houses submarine ..... May 14 *46
Shopping centers see subject
Silver Spring, Md.
Low cost warehouse (unit prices) ..... Mar. 19 99
Toledo
School overcrowding may be relieved by purchase of prefabricated steel buildings ..... Mar. 12 64
Toronto
U. S. firms open Canadian offices ..... Jan. 8 (F) *56
Tullahoma, Tenn.
Supersonic test center for Air Force ..... Apr. 30 (F) *30
Supersonic test center will require giant cooling system ... Apr. 30 (F) *32
Wake Island
Rebuilding structures damaged by typhoon ..... Feb. 26 26
Washington, D. C.
Office building with flat-plate construction ..... Jan. 8 (F) *36
Whittier, Calif.
Lab building's tilt-up lift-slab job speeded by fork-lift truck .. May 14 *44
Williamsburg, Va.
Advised to build state hospital to replace one to be moved .... May 7 53
Youngstown
Hospital carpenters return to work ..... Apr. 16 31
Buildings see also Garages, Housing, Public Works, Shopping Centers
Bus terminals—Rome bus terminal planned ..... Feb. 19 207
Business spending surveyed by McGraw-Hill (chart) ..... Apr. 2 *86

* Illustrated; e, editorials; (F) Articles over a page

C

Cables and Cableways
Aerial ropeway aids drilling rig in Borneo ..... Feb. 12 34
Chesapeake Bay Bridge—quicker cable-strand method Blair Birdsall ..... Jan. 8 (F) *43
Plastic tubing for prestressing cables ..... Feb. 19 *189
Plastic tubing holds cables for San Francisco garage Robert Marx ..... Jan. 22 14
Sweden's record 50-mile cable for power ..... May 14 56

Caissons
Denver airport building constructed on bored caisson foundation ..... Jan. 1 (F) *57
Kansas City's Paseo bridge to have pneumatic caisson piers .. Apr. 16 (F) *35
Stockholm, Sweden, deep caissons stabilize weak bank spanned by new bridge ..... Jan. 22 (F) *41

Canada
U. S. firms in Canada Kenneth Howard ..... Mar. 19 11
U. S. firms open Canadian offices ..... Jan. 8 (F) *56
Canadian Construction Assn. meets in Montreal ..... Jan. 29 26

Canals
Central Valley canal rejected by Bureau of Reclamation ..... Mar. 12 34
Chain of Rocks canal opened ... Feb. 19 *47
France—Ottmarsheim canal, part of power plant ..... Apr. 16 *41
Gila irrigation canal trimmed by giant trencher and with a mule rig. May 21 *47
Gila Reclamation Project—Wellton-Mohawk Canal—slip-form lining ..... Mar. 12 *36
Nicaragua Canal—evaporation recollections G. R. Wadleigh ..... May 28 6
Panama Canal appropriations to be investigated ..... Feb. 5 23
Russia building huge canals for irrigation, inland waterways .... June 18 58
Venezuela starts canal ..... Feb. 19 206

Cement
Asphaltic concrete and soil-cement tested as substitutes for riprap ..... Mar. 26 37
Bozolin, cement-like product, to be exploited in Israel ..... Mar. 26 87
Cement finisher school is first in the country ..... June 4 29
Denver—a question of cement .. Apr. 30 83
Los Angeles cement shortage .... May 7 102
Modern masonry cements don't cause cracking J. W. McBurney ..... June 4 9
Chimneys—Flare stack 250 ft high rests on 2-in. steel ball, Wales ..... June 4 *72

Cities
Dallas annexes area of nine square miles ..... Jan. 15 55
New York City has problem trying to meet new budget ..... Apr. 23 56
Toronto suburbs merge with parent city ..... Apr. 23 57
Cities see also Planning
Cofferdams—"Clamp-on" cofferdam repairs swing pier of B & O railroad bridge in tidewater ..... June 11 *43
Cole, Albert M. named to head Housing & Home Finance Agency .... Mar. 5 (F) *60
Collins, William, of Kidde Constructors, constructing atomic lab at Garden City, N. Y. ..... Apr. 16 (F) *156
Columns—Formula for tapered timber columns E. I. Flesenheiser ..... Mar. 26 *90

Concrete
Aggregates
Chief Joseph Dam aggregate manufacture ..... June 18 (F) *43
Asphaltic concrete and soil-cement tested as substitute rip-rap .. Mar. 26 37
Blocks—glazed coating ..... Jan. 15 156
Electric heating for cold-weather pours ..... Mar. 5 56
Felt roofing can be used as slab moisture seal ..... May 21 68
Fly-ash
Chicago experiments with fly-ash blends in a test pavement built in 1938 W. T. McClenahan ..... Mar. 12 (F) *32
Fly ash in concrete urged upon the Navy ..... Jan. 8 27
Forms
Flat-plate reinforced concrete office building in Washington, D. C. ..... Jan. 8 (F) *36

Panels cast in plastic forms discussed at ACI meeting...Feb. 26 25
Tilting method used to erect San Francisco warehouse in 11 days Mar. 5 *41
Heavy barite concrete slows gamma rays ...Apr. 2 64
Houston, Tex.—Melrose Building's concrete canopies reduce operating costs for air conditioning...Jan. 8 *64
NBS Structural Laboratory studying concrete under impact...Feb. 5 84
Perlite concrete roof cast on metal lath, Brecksville, Ohio...May 21 *45
Perlite heat coefficients...May 7 70
Perlite Institute offers guaranteed material ...May 28-85 e112
Precasting
African bridge has precast elements for stability when bridge is submerged ...June 25 (F) *53
Deep-water piers are precast concrete-electric transmission tower, San Francisco ...Mar. 5 (F) *30
English prestressed bridge uses precast elements ...Apr. 16 77
French precast houses...Mar. 12 69
Pumice concrete precast for Idaho highway bridge ...Apr. 9 *26
Pumping foam concrete into wall forms for small house panels Apr. 23 (F) *47
Sandwich wall panels of concrete and cellular glass for small houses Apr. 23 (F) *46
Prestressed
Against partial prestress A. M. Lount ...Jan. 15 10
Bar stresses set too low J. W. Finch Feb. 12 12
Beams prestressed for fast erection of mezzanine of Glenn L. Martin plant F. W. Wilcox...June 18 (F) *32
Bologna footbridge supported by one prestressed girder only Jan. 29 *57
Bridges of prestressed concrete cost less D. H. Lee...Jan. 22 14
Canada—prestressed-concrete pipe failure halts job Feb. 19 47 R. H. Doull ...May 21 7
Canadian engineers review progress in construction ...June 4 (F) *25
Cold-worked bars in beams N. L. Ashton ...Jan. 15 10
Denver warehouse roof prestressed Mar. 26 *27
England tests post-tensioned highway slabs ...Apr. 23 (F) *59
Factories for prestressing big business in Pennsylvania...Jan. 15 (F) *35
Failure of Lodi, Calif. warehouse probed ...May 28 *25
For partial prestress Paul Rogers Apr. 2 11
Girders in low-cost Long Beach warehouse are prestressed...June 11 (F) *41
Louisville garage waffle-slab roof lifted ...May 21 *27
Navy initiates prestressed drydock study ...Feb. 12 25
New York City's Pier 57's deck stringers are awarded to dockbuilders ...Jan. 29 (F) *28
Objection to alternate designs voiced at conference ...May 7 26
Prestressed pavement L. Coff...Apr. 9 10
Slabs cast on ground, then lifted into place for two new buildings Apr. 16 *39
Tacoma, Wash. factory produces prestressed buildings...Mar. 19 (F) *31
Tampa Bay Bridge—superstructure beams made in factory Feb. 26 (F) *37
Reinforcing
Sweden reinforces bridges with ring-and-wedge anchored bars Ake Holmberg...May 7 (F) *57
Slabs
Slab floor laying for basementless homes ...May 21 71
Tilt-up lift-slab job speeded by fork-lift truck ...May 14 *44
Tetrapod, jetty blocks, developed by French hydraulic laboratory Jan. 8 (F) *32
Tunnels
East Delaware River Water Supply Tunnel concrete placing Mar. 26 (F) *32
Vermiculite concrete applied to elevator shaft ...Feb. 26 *78
Walls of popcorn concrete at Chaumont, France ...June 11 *36
Water-cement ration found by electrical instrument ...June 11 *51

Construction

Air Force postponing work at 14 bases May 21 (F) 21
American firms have branches in Canada R. F. Kane...Feb. 5 40
Antitrust Division is eyed by the construction industry ...Apr. 9 22
Appraisal of trends and the task ahead ...Feb. 19 (F) *51-64
Army and Navy cutting construction programs ...May 21 (F) 21
Backlog of construction (chart) Feb. 19 *269
Backlog of proposed engineering construction, Dec. 31, 1952 (table) Feb. 19 75
Bids are lower on California jobs in spite of rising U. S. cost trend ...May 21 103
Budget cuts easier with new federal projects ...Mar. 19 28
Budget cuts falling chiefly on proposed projects ...Apr. 9 (F) 21
Budget for 1954 construction (tables) Jan. 15 (F) 21
Budget order deals lightly with federal civil works ...Feb. 19 43
Canada—heavy construction contracts awarded (chart) ...Apr. 30 80
Commercial construction is setting record pace (chart) ...Feb. 19 *267
Congress backing heavy cuts in construction spending (table) June 4 (F) 21
Congress committee chairmen named—will closely scrutinize construction legislation ...Jan. 29 (F) *21
Congress goes into session...Jan. 15 28
Congress schedules hearings on construction legislation ...Apr. 16 21
Congress to scrutinize federal construction plans ...Jan. 8 (F) 21
Construction after the defense boom (charts) ...Feb. 19 (F) *65
Construction boom launched with record first quarter (chart) Mar. 26 (F) 21
Construction data to face slash in appropriations by U. S. Government ...June 11 100
Construction trends ...Apr. 16 158
Construction will be good in 1953 Jan. 1 22
Contract awards study shows industrial dispersion (table) ...Feb. 19 271
Controls virtually ended for construction industry ...Feb. 19 44
Costs
Costs steady ...Feb. 5 125
ENR cost indexes in 21 cities (table) Mar. 5 96
Petit theory of trends of construction costs (chart)...Apr. 23 (F) 106
Council of Economic Advisors reports on nation's economy ...Jan. 22 22
Economies in federal construction programs now face test in Senate June 25 26
Estimated expenditures on new plant and equipment 1952, 1953 (table) Jan. 1 22
Federal awards delayed for review Feb. 12 (F) 21
Federal grants to be studied by Congress at the President's request Apr. 2 22
Federal projects drastically cut...Apr. 23 11
Forecast corrected B. M. Fowler...Jan. 8 10
German construction H. W. Puell Apr. 30 10
Heavy construction backlog (chart) Mar. 19 103
House asked to deny funds for 44 Army Engineer jobs ...May 28 (F) 21
Industrial construction to feel new surge ...Jan. 1 22
Innocents abroad...May 14 153 May 21 e128
Japanese study $1 billion building plan Jan. 1 43
Joint Construction Agency—new command post for military construction in France W. G. Bowman June 11 (F) *33
Kentucky freezes building funds Feb. 5 *26
Long-Morse and other critical reports spur review of defense construction Feb. 26 22
Mexico lists construction budget Feb. 19 199
Military construction—first look Jan. 8 e124
Military spending to hold high pace (chart & table)...Feb. 19 (F) *83
Municipal borrowing for construction sets record ...May 21 104
1952 construction contracts...Jan. 1 (F) 21
Paley Report findings questioned Jan. 15 25
Philippines lift taxes on military construction ...Feb. 19 206
Plant expansion by industries 1950, 1951, 1952 (table) ...Feb. 19 54
President's first message sets middle course ...Feb. 9 (F) *21
Private work outpaces public work in moving from backlog to contract (chart) ...Apr. 16 *160
State and local debt—too big?...Jan. 22 17
Unclassified construction 1950, 1951, 1952 (table) ...Feb. 19 54
U. S. business: the big picture...May 21 103

Construction Equipment

Amphibious drill barge...June 4 *47
Bridge survey platforms...May 21 *25
Cleveland Pneumatic Tool Co. workers will buy company through profit-sharing trust plan...Jan. 29 82
Concrete mix tested with electrical instrument ...June 11 *51
Conditional sales bother distributors Apr. 16 160
Depreciation rate revision studied by Treasury experts ...Mar. 19 26
Distributor of construction equipment can expect good business but tougher competition J. R. Carr...Feb. 12 (F) 60
Dredge bucket fastened to backhoe designed by New Zealanders...Feb. 19 *209
Earthmoving industry conference considers problems raised by state regulations R. H. Dodds...Apr. 16 24
Electrical metallic tubing carried by overhead conveyors to belt conveyors for shipment ...Apr. 16 *55
Equipment shipments may follow trend of awards ...June 25 *82
Fork-lift truck speeds tilt-up lift-slab job ...May 14 *44
Hydraulic jumbo in tunneling job, Delaware Water Supply ...Mar. 26 *34
Jacks
Mississippi River—highway bridge lowered 80 ft for dismantling on bank of river...Jan. 22 (F) *44
Lawn mower, floating, removes lake weeds ...May 14 *47
LeTourneau to sell part of machinery business to Westinghouse ...May 7 101
New Hampshire compression tester exhibited ...Jan. 8 *75
1952 best yet for equipment makers Mar. 19 104
Pile drivers used as compactors on sand foundations for pipeline compressor building ...June 25 *62
Pneumatic rollers cut costs and time on earth fill dams G. E. Bertram Apr. 2 (F) *30
Railway "car" for continuous invert concreting in Delaware Water Supply tunneling ...Mar. 26 *36
Rock drill powered by steam generator tested by Institute of Inventive Research ...June 11 *66
Selling abroad ...May 14 153 May 21 e128
Shipments of construction machinery 1950, 1951, 1952 (table)...Feb. 19 57
Stud driver, cartridge-powered, used in Washington office building...Jan. 8 38
Taxpayers get a break on depreciation rates ...May 21 104
Thermostats show level of asphalt in tanks ...Jan. 8 *64
Track-riding tractor used in Delaware sewage job ...Jan. 15 *45
Trencher excavates and trims Gila canal ...May 21 *47
Trenching machine builds low-cost road in Texas ...Apr. 30 *40
Vibrating machine used for concreting Air Force base near Lincoln, Neb. June 18 *39
Wire rope—why not follow the maker's recommendations? L. C. Torrell Jan. 29 (F) *38

Construction Materials

ASTM committees recommend new and revised materials standards...Mar. 19 28
Bozoan, cement-like product...Mar. 26 87
Building materials companies sell more but make less profit per sales dollar (table) ...May 14 151
Ceramic tile held together by prestressing cable...Feb. 12 *210
Coal-tar pavements containing rubber show promise for jet-plane runways ...Mar. 5 42
Decontrol of construction items lags behind hectic OPS moves...Mar. 12 22
Defense Materials System to replace Controlled Materials Plan...Mar. 26 25
Fly-ash
Chicago experiments with fly-ash blends in a test pavement built in 1938 W. T. McClenahan Mar. 12 (F) *32
Fly-ash and lime in roads L. J. Minnick ...Jan. 8 10
Navy urged to use fly ash in concrete ...Jan. 8 27
Materials and labor prices Jan. 8-84 Feb. 5-91 Mar. 5-90 Apr. 2-93 May 7-92 ...June 4 103
Models in masonry cements don't cause cracking J. W. McBurney, C. E. Wuerpel ...June 4 9
Mortar with excessive magnesium oxide causes masonry cracking May 7 34
Paley Report findings questioned Jan. 15 25
Perlite concrete roof cast on steel lath Bucksville, Ohio ...May 21 *45
Perlite heat coefficients ...May 7 70
Perlite Institute offers guaranteed material ...May 28-85 e112
Plastic forms for panels discussed at ACI meeting ...Feb. 26 25
Plastic tubing for prestressing cables Feb. 19 *180
Plastic tubing holds cables for San Francisco garage Robert Marx Jan. 22 14
Price control removal hailed by building industry ...Feb. 26 (F) 21
Prices of building material inches up Apr. 2 87
Russia reports building material shortage ...Mar. 12 66
Shipments of construction materials 1950, 1951, 1952 (table)...Feb. 19 55
Spain—construction materials prices (table) ...May 14 10
Sprayed-on plastic bonds acoustic plaster to concrete in Washington office building ...Jan. 8 36

* Illustrated; e, editorials; (F) Articles over a page

Tar-rubber base paving tests set at Tucson, Ariz. airport ..... Apr. 23 26
Wire cloth used to strain water in English filtration plant A. W. Consoer Apr. 9 (F) *36
Zeprex, mineral material from Sweden, to replace concrete in building superstructures ..... Apr. 2 *88
Construction Materials see also—Aluminum, Cement, Concrete, Steel, etc.

Contractors

Alexandria, Va. housing contractor withdraws low bid, harassed by labor troubles ..... Jan. 8 28
Arkansas revises contractors' bond provisions ..... Apr. 9 27
Cincinnati contractor files suit for payment of "extras" ..... Jan. 8 103
Jan. 15 56
Construction firm fights North Carolina painters ..... Feb. 26 28
Federal construction contract forms fail to solve disputes-clause question June 11 25
Kentucky to assess damages for delays Feb. 26 24
Louisville contractor puts siding up on wrong house, pays for damages Apr. 16 51
Milwaukee contractor sues union for damages ..... Jan. 15 32
New federal contract forms postponed ..... June 18-24 June 25 24
Philadelphia bars contractors from bidding on sewer projects due to unsatisfactory work on city playgrounds ..... Mar. 19 50
Philadelphia considers contractor rating Mar. 26 60
Philadelphia to put contractors under performance rating system ..... June 4 21
Savannah River H-bomb project—construction firm sued over joint venture agreement ..... Apr. 16 22
Western Pennsylvania Sand & Gravel companies face contempt charges Apr. 30 27

Contracts

AGC seeks new procedures in government contracting R. H. Dodds Apr. 2 (F) *23

Bids
Bid shopping bill moves forward June 25 26
Bid-shopping hit by Detroit resolution ..... Apr. 30 44
Bid shopping is an internal problem May 14 e180
Bid shopping legislation approaching showdown in Congress June 18 27
Bid Shopping Senate-House committees end hearings ..... Apr. 23 (F) *23
Defense bid advertising to await job approval ..... Mar. 5 23
Federal bid-shopping ..... Feb. 19 43
Georgia's legislature gets into bid-shopping fight ..... Feb. 5 23
Massachusetts contractor groups change tactics in fight over bid-shopping laws ..... Feb. 5 28
Cleveland awards engineering contract to member of the city's Bd. of Standards & Appeals ..... Mar. 19 47
Congress may review contract decisions ..... Jan. 29 24
Defense Department changes regulations for architect-engineering service contracts. Jan. 22-21 Feb. 5 e152
Defense Department changes regulations for architect-engineering service contracts—in favor of competitive designs—Louis Balog ..... Mar. 5 15
ENR contracts awarded in 1952 (table) Feb. 19 58
ENR contracts awards 1952, 1953 (table) ..... Feb. 19 53
Incentive contract on New York City Sewage Treatment tunnel job June 11 23
Montgomery, Ala. sewer charges held illegal ..... Apr. 16 62
New York City now requires contract bonds ..... Feb. 19 (F) *220
New York State's small contract policy Feb. 19 225
1952 construction contracts. Jan. 1 (F) 21
Walsh-Healey Public Con. revision saves book work ..... Apr. 9 31

Controlled Materials Plan

Building industry hails decontrols Feb. 26 (F) 21
Controls virtually ended for construction industry ..... Feb. 19 44
Defense Materials System to replace CMP ..... Mar. 26 25
Conveyor proposed to replace New York subway shuttle ..... May 7 *47
Cook, G. Yates, heads NAHB's "Baltimore Plan" for redevelopment. Apr. 2 59
Council of Economic Advisors reports on nation's economy ..... Jan. 22 22
Cross, Hardy, of Yale, retires ..... May 28 *63

D

Dams

Australia
Tumut Pond Dam to be built in Snowy Mountains W. A. Dexheimer (map) Feb. 5 (F) *58
Bagnell Dam
Flood-control plan meets opposition from FPC ..... Feb. 5 27 Feb. 26 e88
Bear River Dam, Calif.
Concrete facing placed on rubble masonry L. L. Wise ..... Jan. 22 (F) *35
Big Carson Dam, Calif.
(Unit prices) ..... June 11 92
Boone Dam, Tenn.
Completion and dedication ..... Jan. 1 24
Cachuma Dam, Calif.
Construction completed on Santa Ynez River ..... June 11 26
Canyon Ferry Dam, Mont.
Reservoir is forming ..... Apr. 16 *27
Cheatham Dam, Md.
New lock opened ..... Jan. 1 *24
Chief Joseph Dam, Washington
Costs found lower than estimate Feb. 12 23
Project description ..... June 18 (F) *40
China
Yangtze dams for flood control Mar. 12 *69
Dalles Dam
Bids opened for powerhouse and assembly bay ..... May 28 *27
Columbia River Basin projects near end of funds ..... Mar. 12 22
Davis Dam
Finishing touches ..... Apr. 16 *40
Denver
Change in design saves water department $40,000 ..... Apr. 30 26
Detroit Dam
Dedication of dam—fourth in Willamette Basin program ..... June 18 *26
Finishing dam ..... Mar. 12 *37
Earthfill dams
Pneumatic rollers cut costs and time on earthfill dams G. E. Bertram ..... Apr. 2 (F) *30
Folsom Dam, Calif.
Bore-hole camera—new aid for foundation men ..... June 25 *39
Cofferdam breaks earlier than expected ..... Jan. 22 24
Earth fault to delay project. Apr. 2 26
Excavation for tailrace and timbering for penstock tunnel ..... Mar. 12 *37
Flood again disrupts project. June 4 24
Fort Gibson Dam, Okla.
Reinforced concrete dam dedicated June 18 *27
Fort Patrick Henry Dam, Tenn.
Concrete gravity type dam in construction ..... Jan. 1 *24
Fort Randall Dam, S. D.
Replacing bridge behind dam. Apr. 2 *27
Work is proceeding ..... Apr. 23 *43
France
Durance River earth-fill dam to be built ..... Apr. 16 88
Furman Shoals Dam, Ga.
Georgia Power's hydro project in final stage ..... Apr. 16 *28
Garrison Dam, N. D.
Ceremonies at diversion of the river June 18 26
Dragline removes earth plug to allow cofferdam build-up. Apr. 23 *27
Gavins Point Dam, S. D.
Army unfreezes project for $17-million award ..... Mar. 12 27
Dredge gives low bidders edge over competitors ..... Mar. 19 *27
Stage 2 bid is low ..... Feb. 12 64
Glendo Dam, Wyo.
Controversy ended ..... June 4 22
Grand Coulee Dam
Landslides and rising lake menaces area ..... May 14 27
Stator cleaned before placing rotor at pump ..... May 21 *46
Greece
Kremasta Dam projected for hydro power ..... May 14 *90
Megdova River earth dam to increase irrigation (map) ..... May 14 *90
Hell's Canyon, Idaho
Dept. of Interior remains neutral in controversy ..... May 14 23
Housatonic River, Conn.
New power dam ..... June 25 *31
House asked to deny funds for certain Army Engineer jobs ..... May 28 (F) 21
Hungry Horse Dam
First use of the highway across the dam ..... Feb. 5 *27
Iran
Rubble masonry dam, Kuhrang River Apr. 16 *80
Isabella Dam, Calif.
Kern River storage dam completed May 28 *39
Japan
Ishibuchi Dam is an irrigation and power dam ..... May 14 91
River Tama Dam to be built. Mar. 12 68
Kansas River Basin survey report
Policy fight brewing about federal dam projects (Map) ..... Mar. 5 (F) 21
Kenney Dam, B. C.
Newest rockfill dam L. L. Wise Jan. 22 (F) *35
Libby Dam, Montana
Army engineers recall plans. Apr. 16 26
Libby, Mont.
British Columbia group ponders power expansion ..... Feb. 12 32
McNary Dam, Ore.
First water over the spillways. June 4 *46
No more big dams ..... Jan. 22 e108
Oahe Dam, S. D.
Bill concerning work ..... Feb. 5 23
Budget restores part of amount requested ..... May 14 27
Construction controversy ..... Jan. 8 *27
Groups opposing stopping of project Apr. 30 23
Threat to dam fails ..... Mar. 12 28
Old Hickory Dam, Tenn.
Jurisdictional dispute ends. Mar. 26 30
Lock and dam is one-third done Jan. 1 25
Pactola Dam, S. D.
Earth-fill dam (unit prices). Jan. 1 56
Palisades Dam, Idaho
Templet of tunnel segment. May 28 *39
Perkiomen Dam, Pa.
Water company defends dam site Jan. 22 52
Philippine Is.
Ambuklao bids F. C. Rodriguez June 11 10
Ambuklao Dam ..... Apr. 16 (F) *43
Ambuklao Dam contract awarded Feb. 5 124
Mar. 12 68
Ambuklao Dam to be constructed Jan. 15 79
Philipott Dam, Va.
Construction completed ..... Mar. 5 *27
Priest River Dam
Corps of Engineers does not oppose dam Co. E. C. Itschner ..... Mar. 19 11
Dam opposed by Army Engineers and the AEC ..... Feb. 5 27
Rockfill dams design and construction L. L. Wise ..... Jan. 22 (F) *35
Sardinia
Hydro project to add to island's potential ..... June 11 56
Shasta Dam
Flood to halt floods floods out a town ..... Jan. 29 24
Snake River, Idaho
Idaho Power ready to undertake three dams ..... May 28 22
Stewart Mountain Dam, Ariz.
Grouting stops leakage ..... Apr. 30 *27
Techniques and trends in river use and control ..... Feb. 19 (F) *105
Tenkiller Ferry Dam, Okla.
Rolled earth-fill dam dedicated June 18 27
Tennessee River
Nantahala Power & Light building three more dams for extra power May 14 (F) *51
Trinity River Dam, Calif.
California approves project. Apr. 30 26
Tuttle Creek Dam
Groups opposing stopping of project Apr. 30 23
Wind River Diversion Dam, Wyo.
Frazil ice, kept moving by "slush plow" ..... Jan. 15 48
Yale Dam, Washington
Penstock tunnel to have steel lining May 7 24

Defense

Federal Civil Defense to train volunteers in waterworks units ..... Jan. 29 60
Tax incentives tapering off for defense-plant expansion (charts) ..... Jan. 15 *142
Defense Materials System
To replace CMP ..... Mar. 26 25

Defense Production Administration

Certificates of necessity for accelerated amortization issued ..... May 21 105
Defense bid advertising to await job approval ..... Mar. 5 23
Regulations changed for architect-engineering service contracts Jan. 22 21 Feb. 5 e152 in favor of competitive designs Louis Balog Mar. 5 15

Dikes

Chaska Dike and drainage structures, Minnesota (unit prices) ..... Jan. 29 76
Rebuilding dikes in Netherland poses great engineering problems (map) Feb. 26 *48
Venezuela—to open Lake Maracaibo to ocean traffic with dikes. Apr. 16 88
Drainage—Mexico City seeks drainage answers ..... Jan. 1 37

Dredges and Dredging

Japan plans to reclaim land in Tokyo harbor with dredging ..... June 11 *54
New Zealanders design 10-ft. bucket Feb. 19 *209
St. Lawrence dredging started Jan. 22 *25
Drills and drilling—Aerial ropeway aids drilling rig in Borneo ..... Feb. 12 34

Drydocks—Navy initiates drydock study Feb. 12 25
Dunn, Gano dies; headed White Engineering Corp. Apr. 16 22

E

Electro-osmosis method used to dewater power plant site Apr. 30 (F) *30

Elevators

Electrical controls for elevator system May 7 (F) *32
Freight elevators modernized at the U. S. Army's N. Y. Port of Embarkation Apr. 16 *114
New trend . . . elevators controlled by electrical brains May 7 (F) *32
Three elevators make four in Columbus hospital Mar. 5 42
Elipse circumference Einar Salvig Mar. 12 14
Engineering Foundation—Column Research Council appoints new Committee on Practical Applications June 11 24

Engineers

Artificial shortage Apr. 2 11
Bureau of Labor Statistics on enrollment Ewan Clague Apr. 23 11
Civil engineer grads short Feb. 26 26
Clearer reports needed Jun 18 e132
Collective-bargaining by engineers June 18 e132
Defense Department's policy on contracting services of consulting engineers Jan. 22 21 Feb. 5 e152
Defense Department's policy on contracting for the services of consulting engineers—in favor of competitive designs Louis Balog Mar. 5 15
Engineering teachers Jan. 15 e164
Engineering teachers J. M. Hayes Feb. 26 10
Fabulous salaries? Louis Henke, Jr. June 4 9
Highway engineers course Feb. 5 23
Highway engineers—ENR survey (table) June 25 23
Licensing
Arizona's city licensing ruling May 21 25
Arkansas stiffens law Apr. 9 27
Colorado courts throw out both engineers' and architects' laws Mar. 19 23
Colorado passes engineer-architect acts Apr. 9 24
Connecticut considers amendments Mar. 19 23
Licenses for teachers W. H. Longenecker Jr. Apr. 16 10
New York delays action on corporation practice Mar. 19 23
New York law prohibiting engineering practice by corporations under attack Mar. 12 (F) *21; bill withdrawn Mar. 26 24
New York State considers corporate engineering bill Mar. 5 24
New York State corporations allowed licenses by legal interpretation June 18 25
Practice of engineering by corporations Apr. 30 e108
Mexico changes rule on foreign engineers Feb. 5 22
More engineers through advertising Feb. 5 e152
New vs existing groups A. S. Fry Apr. 16 10
North Carolina's highway jobs go begging Feb. 12 48
Ohio Turnpike engineers' discretionary power restored June 11 e128
Salaries
Civil engineers' income average Apr. 30 26
New York City pollution job slowed by low pay for its engineers May 14 85
Salaries for 1952 graduates Jan. 15 55
The sanitary engineer (charts) Jan. 8 (F) *44
Sanitary engineers—proposed academy A. E. Meyer Jr. May 21 10
Shortage of engineers Robert Skimin Apr. 30 10
Reviewed by National Manpower Commission May 21 27
Subject of ad campaign Jan. 29 25
State paying higher salaries will be able to keep engineers Apr. 9 60
The technical institute Feb. 12 e88
Tennessee court refuses to differentiate between architects and engineers Jan. 15 26; ethics, not law Jan. 29 e108
Toronto rules on four city engineers Apr. 23 31
Wilmington, Del. engineer loses action over fee May 7 52
You can't keep it quiet when a structure fails Apr. 23 e132
Younger generation of engineers: quality partly offsets a shortage May 14 (F) *24
Engineers and Scientists of America activated Jan. 15 31
First convention—election of officers Mar. 5 *26
Southern California engineers refuse to join Apr. 23 31
Escalators
Electric stairways E. B. S. Boyle Feb. 12 15
U. S. Navy's new radiological lab in San Francisco serviced by electric stairways Apr. 2 39

F

Fence of paper tested in Michigan for a snow fence Apr. 16 *52
Fire damages Mexican skyscraper under construction June 11 *39
Fire protection for underground shelter Horatio Bond Mar. 19 11
Flames bent beams and flames correct the deflection Mar. 12 *34 e132

Floods and Flood Protection

Bagnell Dam flood-control plan meets opposition from FPC Feb. 5 27
Feb. 26 e88
British, Dutch rush flood repair work (map) Feb. 12 *47
Budget review continues to bottle up awards for flood control navigation Mar. 26 22
California flood damages highway Feb. 5 26
China-Yangtzê dams for flood control Mar. 12 *69
Congress moves to tighten fund control Jan. 29 24
Dallas floodway strengthening to begin Feb. 12 28
Dutch flood reclamation May 21 66
Flood control ends fears, boosts industrial building says Mississippi Valley Flood Control Assn. Jan. 29 42
Flood control pilot plant funds asked May 21 22
Fort Worth protected by floodways against the Trinity River Apr. 9 *45
Fury of the sea Feb. 12 e88
Kansas Basin survey report before the Kansas legislature (map) Mar. 5 (F) 21
Kansas River flow-way plan criticized by Army Engineers Apr. 23 26
Kansas River flow-way plan discussed at AWWA convention A. J. Fox Jr. May 21 (F) *23
Louisiana suffers heavy flood damage but drainage pays dividends June 4 24
Mississippi River flood control and navigation work for 1953 sets safety record June 18 28
Missouri Basin Inter-Agency Committee tries conciliation of high vs low dam issue Apr. 2 22
Philpott Dam, Va. construction completed Mar. 5 *27
St. Louis Dist. engineers to direct future flood operations from helicopters Apr. 30 24
St. Louis flood control studied by Army Engineers May 28 35
Shasta Dam—flood to halt floods floods out a town Jan. 29 24
Techniques and trends in river use and control Feb. 19 (F) *105
Texas City flood damage limited by emergency levee June 4 25
Unifying flood control Jan. 8 e124
Wells for flood storage F. D. Steiner Mar. 26 10

Floors and Flooring

Asphalted-felt roofing can be used as slab moisture seal May 21 68
Procedures for laying concrete floor slabs May 21 71
Wood-block floor used in General Electric's Appliance Park plant Linton & Nowell June 25 (F) *22
Forgie, James—salute to pioneer tunnel engineer June 11 e128
Forging press of 75,000-ton press Jan. 8 *25

Foundations

Bay City, Mich. site for power plant dewatered by electro-osmosis method Apr. 30 (F) *36
Bigger soil-test plate permits bigger pressures under footings, N. Y. C. Elmhurst Hospital Apr. 16 *51
The bore-hole camera—new aid for foundation men June 25 *39
Boston museum and planetarium built on old dam Mar. 12 *31
Cuban auto tunnel built in difficult soil conditions Jan. 22 *55
Deep-water piers are precast concrete-electric transmission tower, San Francisco Mar. 5 (F) *30
Denver airport building constructed on bored caisson foundation Jan. 1 (F) *57
Detroit water supply station—mystery of the restless substratum—projectile piledriving J. H. Thornley Mar. 19 (F) *33
El Salvador suspension bridge anchorage excavation aided by wellpoints B. J. Prugh May 21 (F) *39
Generator foundation for cosmotron meets unique requirements J. M. Ruddy Mar. 26 (F) *44
Iron blast furnace in Cleveland poses difficult foundation problems Apr. 9 28
Minneapolis-Honeywell plant, Gardenia, Calif. grading accomplished as a benefit performance Apr. 30 *23
More soil-test data wanted G. P. Tschebotarioff June 4 10
New York City trunk sewer built under a railroad involves novel underpinning methods C. B. Spencer Feb. 12 (F) *31
Permanent wellpoints keep sewage tanks from floating, Syracuse, N. Y. Mar. 26 *47
Pile drivers used as compactors as loose sand would support building at Blythe, Calif. June 25 *62
Safe Harbor wharf built on sheetpile cells located on rock and filled with heavy pervious material J. H. Patterson Apr. 23 *36
San Francisco Bay wharf piles placed in drilled holes on steel slope May 14 *48
Sphere for atomic submarine laboratory placed on quaky soil drained by wellpoints D. A. Werblin Apr. 9 (F) *33
Stabilizing wet soil with electro-osmosis B. J. Pugh June 18 12
Stockholm, Sweden, deep caissons stabilize weak bank spanned by new bridge Jan. 22 (F) *41
Texas A & M college building foundation excavated mostly by machine C. S. Adams Apr. 16 *48
Textbooks on soil wrong? G. P. Tschebotarioff June 25 13
Uniform oil penetration obtained with spray bar S. G. Feldman Apr. 2 *64
Franks, Carl D. new president of Portland Cement Assn. June 11 *59

G

Garages

Baltimore to build garage in downtown area Apr. 23 49
Chicago building underground parking garage Feb. 26 *43
Chicago digs for underground garage Apr. 2 *43
Cleveland to have garage under the Mall Apr. 23 51
Columbus, Ohio, department store constructing multi-level garage June 18 50
Great Britain—underground garages proposed for London Apr. 2 43
Houston, Tex. 10-story garage proposed Mar. 26 *64
Louisville garage prestressed waffle-slab roof lifted May 21 *27
Louisville garage roof cast in two sections on ground-floor slab, then lifted into position Apr. 16 *39
Memphis to build underground parking garage June 18 49
Philadelphia garage gets two more levels Feb. 5 *46
Pittsburgh parking garage auto servicing halted Mar. 26 56
Portland, Ore. multi-tiered pigeon-hole parking garages create new noise problem Apr. 2 47
San Francisco to have six-story garage Apr. 23 49
Garages see also Street Traffic, (Parking)

Garbage and Refuse Disposal

Columbus, Ohio, will test turning garbage into salable fertilizer Mar. 26 64
Composting provides no panacea May 28 e112
Hagerstown, Md. does not want composting process after learning about Bay Shore's troubles Apr. 23 24
Pennsylvania's Allegheny County seeks refuse disposal on a county-wide basis Feb. 12 45
Phoenix, Ariz. to salvage tin cans for copper industry Mar. 19 51
Techniques and trends in water supply and sanitation Feb. 19 (F) *144
West Coast consultant analyzes age-old waste handling process May 28 35
Gas, hydrogen fluoride, detected by instrument at Stanford Apr. 9 44
Gordon, Guy of Oregon: key man in federal public public works policy June 4 *76
Grouting see Shotcrete

H

Hess, Seth G. fights pollution of three states' rivers Mar. 26 *68

Highway Administration

Arkansas highway director to be Herbert Eldridge Apr. 23 *69
Changes in federal highway policies to await administration's studies Apr. 23 21

• Illustrated; e, editorials; (F) Articles over a page

Florida road board drops about 400 employees ..... Jan. 29 60
Highway engineers—ENR survey (table) ..... June 25 23
Kansas reorganizes highway department ..... June 25 24
Kansas City Bureau of Public Roads combines divisions ..... June 11 26
MacDonald retires as Commissioner; Du Pont takes over Mar. 12-28 Mar. 26 27; Apr. 2 (F) *52; Apr. 9 ..... e128
Nebraska to establish a highway commission ..... Feb. 5 26
North Carolina appoints new road commission ..... May 21 25
North Carolina Highway Commission to be reorganized ..... Feb. 12 24

Highway Construction

Asphalt roads defended George Kling May 14 6
Cement and asphaltic concrete paving road test to be made in Oklahoma May 26 26
Coal-tar pavements containing rubber show promise for jet-planes runways Mar. 5 42
Delaware darkens concrete pavement to reduce total paving outlay June 4 *60
Elgin, Ill. township road stabilized with salt ..... June 25 (F) *43
England tests post-tensioned highway slabs ..... Apr. 23 (F) *59
Fly-ash and lime in roads L. J. Minnick ..... Jan. 8 10
Prestressed pavement L. Coff ... Apr. 9 10
Ridge Route, Calif. six-year modernization is over ..... Apr. 2 (F) *35
Techniques and trends in transportation ..... Feb. 19 (F) *120
Texas treats road bases with quicklime Feb. 5 (F) *38
Trencher builds low-cost road in Texas Apr. 30 40

Highway Design

Bumpless bump to discourage speeders designed by A. H. Compton .. Mar. 26 24
Indiana builds its own test pavements Jan. 15 (F) *46
Locating super roads among existing utilities Harlow & Harris Mar. 5 (F) *32

Highway Economics

Arkansas changes highway policies Apr. 9 27
Arkansas highway appropriations Apr. 9 28
Arkansas proposes revenue bonds for toll roads ..... Feb. 5 26
Baltimore highway budget .... Feb. 19 272
British Columbia voted record highway program ..... Apr. 30 24
Colorado votes 20-year road program Apr. 9 28
Congressional committee to study highway financing ..... Apr. 9 27
Connecticut's proposed program? Feb. 5 23
Connecticut to take tolls on paid-up projects as aid to big road program June 11 26
Forest road funds increased .... Apr. 2 22
Gasoline taxes
ARBA hears officials urge federal gas tax be used for roads Feb. 19 (F) *45
Federal automotive tax receipts Feb. 26 24
Federal gas tax policy draws support ..... May 7 22
Federal taxes for highways .. May 28 e112
Federal highway policy hearing Apr. 30 24
More federal road aid ..... Jan. 22 e108
State highway officials urge raising federal aid to full gas tax income May 21 24
Who gets the gas tax? ..... Apr. 15 e184
Gathering momentum ..... Mar. 19 e128
General Motors contest winners for essays on how to pay and plan for adequate and safe highways June 25 (F) *21
Highway price index, composite standard mile (table) ..... Feb. 26 64
Highway Research Board summarizes study made by U. S. Bureau of Public Roads ..... Jan. 22 *23
House cuts highway funds ..... May 7 22
Maryland legislature approves 12-year road program ..... Apr. 16 23
Massachusetts slows down on road contracts ..... May 29 27
Minnesota to reshape basis on which state funds are allocated .... May 14 26
1951 revenues ..... Jan. 8 103
1953 highway budgets (table) Mar. 19 (F) 21
Ohio governor asks immediate funds Feb. 5 26
Ohio having trouble with its road program ..... Jan. 22 28
Ohio seeks new road revenues .. May 21 24
Oregon sets a record R. H. Baldock May 28 6
Pennsylvania bond sales set .... Jan. 29 79
State highway programs 1952-1953 (table) ..... Mar. 19 22
State legislatures face heavy 1953 agenda ..... Jan. 8 24
Toll roads, construction programs (table) ..... Mar. 19 22
Highway lighting
Portland, Ore. highway lighting June 4 *47

Highway Maintenance

German de-freezer benefits doubted May 14 88
Rust inhibitor used with rock salt Jan. 15 *160

Highway Research

Highway Research Board to study matching trucks, roads for economy aid ..... Jan. 29 23
Maryland road test data distorted, truckers say ..... Jan. 22 28
Oklahoma road materials test to be made ..... May 26 26
Highway Research Board
Annual meeting ..... Jan. 22 *23

Highway Safety

Bumpless bump to discourage speeders designed by Dr. A. H. Compton Mar. 26 24
New safety measures recommended for the Pennsylvania Turnpike .. Apr. 16 24
Pennsylvania Turnpike experiments with medium barriers ..... May 21 24
Speeds and motor accidents .... Jan. 29 e108
Trees survive collisions in Virginia, state will remove them ..... May 14 27

Highway Traffic

California highway planning survey aided by Census Bureau interviews Mar. 26 *43
Hollywood detour handles 100,000 cars May 28 *40
Realistic speed regulation ..... June 25 e108

Highways

Alaska Highway surfacing (unit prices) June 25 77
Bay City to Toledo, Ohio, highway endorsed ..... Mar. 12 64
Bolivia-Cochabamba highway E. K. McNeil ..... Jan. 1 13
Brazil needs more surfaced roads Mar. 26 82
Brazilian state asks World Bank funds for road-building machines .. Jan. 15 72
Buffalo-Niagara Thruway will ease traffic flow problems, C. R. Waters Mar. 19 (F) *41
Carolina-Virginia Highway Corp. invalidated by North Carolina .. Feb. 5 22
Charleston-Princeton toll highway routes studied ..... Jan. 8 26
Chesapeake Bay Bridge-Delaware Memorial Bridge toll road proposed Jan. 8 26
Colombia's highway program active Jan. 29 57
Colorado considers tunnel under Continental Divide ..... Apr. 16 23
Connecticut highway construction (unit prices) ..... Apr. 23 98
Connecticut plans expressway network (map) ..... Apr. 9 *25
Connecticut toll highway approved May 28 27
Denver-Boulder Turnpike rated a financial success ..... Feb. 5 22
Detroit
Automobile test track being constructed near the city ..... Mar. 5 *42
Detroit to Chicago highway endorsed ..... Mar. 12 64
Toll road study authorized .. May 28 26
Fairfield County, Conn. Thruway authorized ..... Mar. 12 28
Garden State Parkway
N. J. highway financing upheld May 28 23
To stay within original cost estimates ..... Feb. 26 65
General Motors contest winners for essays on how to pay and plan for adequate and safe highways June 25 (F) *21
Georgia Bridge Authority bill passes lower house ..... Feb. 12 62
Houston, Tex. Jensen traffic interchange May 21 *46
Illinois Supreme Court upholds Freeway Act of 1943 ..... Feb. 5 26
Indiana toll road
Contracts to be awarded in 1954 Jan. 8 25
Indiana Turnpike
Two contracts awarded ..... Jan. 15 24
Inter-American Highway
Guatemala to work on highway Jan. 22 58
Israel highway route links industrial-mining areas ..... Feb. 19 200
Italy plans two express highways Feb. 19 206
Jacksonville-Miami toll road faces test Jan. 8 26
Japan considering Tokyo to Kobe superhighway ..... Jan. 1 44
Japanese speedway blocked ... Mar. 12 69
Kansas City's Paseo bridge and expressway ..... Apr. 16 (F) *35
Kentucky highway waits for bridge Apr. 30 45
Louisiana toll highway launched Jan. 22 *26
Louisville-Elizabethtown, Ky. toll road planned ..... Jan. 8 25
Maryland State Roads Commission submits 12-year road program ... Feb. 5 26
Massachusetts highway and bridges (unit prices) ..... June 18 98
Mexico City-Cuernavaca-Iguala expressway tolls ..... Feb. 19 207
Mexico's trans-isthmian highway nearing completion ..... Apr. 16 *77
Miami, Fla. access roads (unit prices) Apr. 30 77
Miami-Jacksonville highway
Construction limited to 110 mi-stretch ..... June 11 25
Miami's traffic problem would be helped by expressway system Jan. 15 51
Milwaukee expressway approved Apr. 2 50
Mississippi coastal highway (unit prices) ..... May 14 144
New Jersey Turnpike
Locating super roads among existing utilities Harlow & Harris Mar. 5 (F) *32
Revenue for first year ..... Jan. 1 25
New Orleans express highway in planning stages ..... Jan. 22 26
New York City
Brooklyn-Queens expressway links boroughs ..... Jan. 8 *50
South Street belt route to join East and West elevated highways May 27 *47
United Nations buildings block no traffic ..... May 23 *36
North Carolina contractors protest ban on small town road jobs ..... Apr. 2 26
Ohio having trouble with its road program ..... Jan. 22 28
Ohio's Pike County atomic energy plant needs funds from government for highways ..... Feb. 12 28
Ohio Turnpike
Asphalt vs concrete case Feb. 26-21 Mar. 5-24 Mar 19-23 Apr. 2-21 Apr. 9-22 Apr. 15 e184 Apr. 23-22 May 7-26 May 14-22 May 21 22
Asphalt controversy—high court reverses lower—concrete pavement decided ..... June 11 (F) 21 e128
Bridge work goes ahead ..... June 11 *21
Engineers' discretionary power restored ..... June 11 e128
Granted access to land for building twin bridges ..... Jan. 15 24
Oklahoma Turnpike
Turner Turnpike starts ..... May 28 24
Pan American Highway
Gifts of cement aid highway .. Mar. 26 77
Pennsylvania Turnpike
Accident probe opens ..... Mar. 5 26
Delaware River extension (unit prices) ..... Mar. 26 142
Experimental barriers built .. May 21 24
New safety measures ..... Apr. 16 24
Safety report made ..... Mar. 19 26
Speeds and motor accidents .. Jan. 29 e108
Vehicle speeds cut due to accident study ..... Jan. 29 27
Pittsburgh
Penn-Lincoln Parkway dedicated June 25 (F) *49
Penn-Lincoln Parkway—first stretch to open ..... Mar. 12 60
Penn-Lincoln tunnel delayed by electricians' strikes ..... Apr. 16 32
Portland-Salem Expressway
Construction under way ..... May 28 *24
Project Adequate Roads put in permanent chairman ..... June 25 59
Puget Sound area will get highway program study (map) ..... Apr. 23 *54
Richmond, Va. expressway may be built by the Commonwealth Turnpike Corp. ..... Jan. 22 80
Ridge Route, Calif. six-year modernization is over ..... Apr. 2 (F) *35
Road construction tops new state-city programs ..... Feb. 5 52
San Diego, Calif. (Montgomery Freeway) Fails to reduce traffic congestion ..... Mar. 26 59
South African government should push roads, not rails for transport .. Jan. 22 58
Spain's road and rail transport system W. G. Bowman ..... May 14 (F) *43
Tacoma-Everett toll road studied Jan. 22 53
Toll roads
Integrate the toll roads ..... Jan. 1 e*80
Not for private promoters .... May 21 e128
Toll-highway proposals mount in states ..... Jan. 15 25; Feb. 12 24

* Illustrated; e, editorials; (F) Articles over a page

Virginia needs toll-road policy-making Feb. 26 23
West Virginia Turnpike
Jobs to be broken up into smaller ones Apr. 30 22
Labor trouble halts work Mar. 26 31
Toll highway speeded Jan. 1 25
West Virginia-North Carolina toll highway financing discussed Jan. 15 24
Wisconsin to study toll road May 21 27
Wisconsin toll highway studied by commission June 25 28
Highways see also Pavements

Housing

AEC boosts private housing in Oak Ridge Jan. 29 79
Akron mayor confirmed for public housing post June 25 26
Alexandria, Va., housing contractor withdraws low bid Jan. 8 28
Allentown, Pa. and Barrington, Ill. precast panel walls for small houses Apr. 23 (F) *46
Architects need broader background for mass-housing design, AIA told June 25 *25
Baltimore redevelopment gets $3 million Feb. 5 55
Baltimore plan: is this the way to beat slums? May 28 *49
Barracks
Air Force counters charges of extravagant construction Jan. 8 26
Buffalo housing plans May 28 59
California sells bonds for veterans home-loan program Feb. 12 62
Canada—Regina to have housing project Apr. 2 50
Carpenter-builder eases house shortage G. H. Herrold June 18 10
Cincinnati to build North Greenhills project Feb. 5 126
Cleveland's Council must approve each new housing project Mar. 19 51
Cleveland public housing Feb. 5 55
Columbus housing plans stopped by legal delays Feb. 12 43
Coming decline in family formation Feb. 12 17
Construction trends Apr. 30 81
Dallas, Tex. $35-million housing project under way in West Dallas Jan. 1 (F) *38
Decline in housing starts seen Mar. 19 100
Defense housing shows progress Feb. 5 126
Detroit to redevelop Gratiot area Apr. 16 61; June 11 47
Eisenhower Administration wants 35,000 housing units Apr. 2 87
Federal Housing Administration gets broader powers to insure home additions Mar. 19 103
Federal Housing Administration now G. T. O. Hollyday Apr. 16 *23
FHA approves "service charge" on low-cost home mortgages Jan. 15 140
FHA mortgage requirements not to be eased this year June 18 104
Federal National Mortgage Assn. survives House move to end its operation Apr. 30 81
Federal National Mortgage Assn. will stay out of the market for now May 21 104
Financing volume for homes running ahead of 1952 Feb. 12 61
Florida and Georgia courts reject slum projects Apr. 23 57
French precast houses Mar. 12 69
Great Britain's housing rate in 1952 Feb. 19 207
Greenbelt, Md. apartments open for bids Feb. 19 268
Greendale, Wis. land sale halted by bid rejection Jan. 8 49
Gunnison prefabricated house called the Talisman Feb. 12 (F) *33
Guttenberg, N. J.—low-rent housing project completed Mar. 12 61
Havana studying a low-cost housing project Mar. 5 59
Home builders sing blues before Senate committee June 25 83
Home builders welcome moves to improve mortgage market May 14 (F) *21
Housing & Home Finance Agency to be headed by Albert M. Cole Mar. 5 (F) *60
Housing is the key June 4 e180
Housing trends May 28 86
Indianapolis Housing Authority sued by government Apr. 30 44
Interest rate boost has done little for builders May 28 85
Interest rates increase May 7 21
Japan needs houses Jan. 29 57
Jersey City to improve two blighted areas Apr. 16 61
Joliet, Ill. prefab development Mar. 26 63
Little Rock, Ark. to improve ten block area Apr. 16 61
Los Angeles Home Show draws 200,000 June 25 (F) *80
Los Angeles housing fight hits redevelopment agency Jan. 29 48
Market for GI, FHA mortgages uncertain as long-term money gets more expensive May 14 153
Middletown, Pa. zoning barrier cleared for Levitt's de luxe homes Mar. 19 50
Milwaukee classifies residential construction Mar. 12 60
Minneapolis planning Glenwood redevelopment project Feb. 5 55
Mortgage bankers cite fears that slums will threaten building funds Jan. 22 81
Nashville, Tenn. to eliminate slum near the state capitol Apr. 16 61
NAHB bolstering the home-building market May 21 e128
NAHB leaders see more progress in homebuilding techniques Feb. 26 (F) *50
NAHB offers trade-in plan to ease buyer's down payment May 14 151
NAHB program headed by G. Y. Cook is called the "Baltimore Plan" Apr. 2 59
New York City
Has seven active projects Apr. 16 61
Morningside-Manhattanville housing project gets go-ahead order Jan. 29 49
Throggs Neck houses June 4 (F) *36
New York State extends rent control for two years May 14 152
Ohio slum clearance approved Mar. 12 *55
Pacific area was the No. 1 housing market last year (table) May 14 152
Paley Report disputed in regard to Federal Mortgage Insurance Jan. 15 25
Philadelphia gives row housing a new look with curved streets Mar. 19 *45
Pittsburgh housing plan backed by protests of North Side residents Feb. 12 43
Portland, Ore. housing project upheld by redevelopment law June 4 57
Portland, Ore. redevelopment plans delayed for study Apr. 2 44
Portland, Ore. revives housing redevelopment plan Feb. 12 45
Prefabricated homes standards to be devised Mar. 26 27
Prefabs can have other uses Feb. 5 e152
Private housing starts pick up May 21 22
Public Housing Administration cut asked Apr. 23 22
Puerto Rico constructing major project May 14 92
The real key to housing Mar. 19 e128
Rent controls extended by Senate Committee Apr. 16 138
St. Louis slum-clearing planned Feb. 19 (F) *224
San Antonio, Tex. builder constructs flexible house Jan. 1 *27
San Diego, Calif. garden-type apartment project delayed by FMA details Jan. 15 52
Schenady tries to stop business trend to suburbs Feb. 5 52
Small Homes Council reports that residential construction can be made resistant to tornado fringe effects June 18 24
Techniques and trends in buildings and housing Feb. 19 (F) *87
Title I racketeers bother California Apr. 30 81
Trailer makers get orders for defense-housing units Feb. 19 272
Trenton, N. J. Donnelly Homes, project draws bids Jan. 29 82
Tulsa plans housing June 4 67
Veterans Administration investigation in San Diego brings convictions Jan. 8 103
Veterans Administration mortgage difficulties shown in survey Mar. 5 24
Veterans Administration's new discount rules: will they cripple VA loans? June 11 100
Veterans Administration restricts discounts on mortgages May 28 86
Veterans Administration-San Diego frauds jail more defendants Mar. 12 106
Wake Island housing to receive CAA money Jan. 8 104
Warren, Ohio, low-cost housing units not taken Apr. 16 66

Hydraulics

Pittsburgh studies how to drop sewage 90 ft vertically to tunnel interceptors L. M. Laushey Mar. 5 (F) *38

Hydro Electric Power

Actions on Reclamation's construction budget Apr. 30 (F) 21
Alaska
Ekutna project wants more funds Mar. 12 27
Australia's Snowy Mountains project W. A. Dexheimr (map) Feb. 5 (F) *58
Austrian hydro power discussed Jan. 29 57
Brazil pushing expanding capacity Mar. 26 82
Canada
Aluminum Co.'s hydro-project-tunneling mark set Mar. 12 27
Fort a la Corne project delayed Jan. 29 57
Refusal to consider Alcoa's proposed diversion of Yukon water to Skagway F. E. Bonner Apr. 23 11
Columbia River Basin projects near end of funds Mar. 12 22
Columbia River Basin waters development studied by British Columbia group Feb. 12 32
Cost indexes for irrigation and hydropower construction (table) Feb. 26 64
Cuban hydro power to be studied by U. S. firm Jan. 15 76
Exypt plans for more irrigation from the Nile and a power station Apr. 16 87
France—Ottmarsheim power plant Apr. 16 *41
French explore sea depths for power and fresh water Mar. 12 (F) *38
Georgia Power's hydro project on Oconee River in final stage Apr. 16 *28
Greece plans hydro and irrigation jobs May 14 *90
Haiti's Artibonite River Valley project Apr. 23 61
Hoover hits power policy in Case Jubilee speech Apr. 16 28
India—first power from Damodar Valley Mar. 12 *36
Japan installing hydro and irrigation jobs May 14 91
Japanese study $1 billion building plan Jan. 1 43
Mexico to start Grijalva River project Feb. 19 199
Moselle River canalization considered June 4 75
Nantahala Power & Light is building three more dams for extra power from the Tennessee River May 14 (F) *51
New water and power projects in doubt Feb. 12 22
Niagara Falls—Ontario Hydro to build pumped-storage plant May 14 22
North Platte irrigation and power plan drawn Mar. 12 28
North Rhodesia approves Kafue River hydro project Mar. 26 78
Owens Gorge Project — switchyard at powerhouse Mar. 12 *37
Pakistan hydro project June 18 59
Pakistan hydro project on the Kabul river Mar. 19 59
Philippine Islands push their hydro program Apr. 16 (F) *43
Power potential of Oregon streams listed (table) June 25 45
Re-examine federal power policies Apr. 23 e132
Roanoke Rapids hydro licensing—back on sensible street Apr. 2 112
Roanoke Rapids hydro project construction to be resumed after two years suspension Mar. 26 28
Russia pushes work on Kuibyshev hydro Jan. 15 79
St. Lawrence power project
Claims get final hearing Feb. 12 62
Dredging started Jan. 22 *25
Gut Dam removed as part of program to develop St. Lawrence River power Jan. 15 26
Sardinia hydro project to add to island's potential June 11 56
Scotland—Breadalbane hydro project approved Mar. 5 59
Siberia hydro station—permanent freezing of soil embankments for dam and station May 7 58
Sweden puts in service Harspranget Dam and underground power plant Mar. 26 *77
Techniques and trends in river use and control Feb. 19 (F) *105
Tennessee Valley area expansion held back by economy June 25 82
TVA design report P. L. Evans June 18 12
TVA selects Muscle Shoals as headquarters Mar. 26 24
Thailand to construct Chainat irrigation dam June 18 58
Turkey—Seyhan project planned Mar. 19 59
Ugando hydro now operating Mar. 26 87
Upper Platte system delivers water and power in Colorado, Wyoming and Nebraska June 4 (F) *38
Wyoming Canal frazil ice kept moving by "slush plow" Jan. 15 48
Yadkin River, N. C. federal land sale delayed Mar. 19 45
Yale penstock tunnel to have steel lining May 7 24
Yugoslav hydro power studied by UN group June 4 75

Hydrology

Australian pondage simulator solves storage problems May 14 91
Evaporation recollections G. R. Wadleigh May 28 6
Evaporation studied by government research project Feb. 5 28
Great Lakes levels can be foretold by statistics Pierce & Vogt Jan. 1 (F) *30
Study determines lake evaporation and tests new measurment methods Mar. 19 *71

I

Inter-American Sanitary Engineering Congress held in Buenos Aires Jan. 1 *43

• Illustrated; e, editorials; (F) Articles over a page

Interstate Sanitation Commission—S. G. Hess fights pollution of three states' rivers ..... Mar. 26 *68

Irrigation

California Irrigation Districts Assn. asks broader financing ..... Apr. 9 *24
California makes irrigation bonds legal investments ..... May 7 27
Central Nebraska Irrigation District's plans defeated when water diversion bill is killed ..... June 4 22
Central Valley Project
Orange Cove District was the first on the Friant-Kern Canal to plan its own system—J. F. Sorenson..Jan. 15 10
Repayment plan scored ..... Mar. 12 105
Sale to be studied by Dept. of Interior ..... June 4 22
Columbia Basin Project
Weber Coulee Siphon ..... Apr. 23 *42
Congress moves to tighten fund control ..... Jan. 29 24
Cost indexes for irrigation and hydropower construction (table)...Feb. 26 64
Egypt plans for more irrigation from the Nile and a power station..Apr. 16 87
Idaho irrigation scheme drafted by Sloan as alternative to Reclamation plans (map) ..... Apr. 16 *25
James River project opposed...Jan. 8 27
Missouri River Basin Commission proposed for development ..... Feb. 26 24
Mountain Home project—competition may pay off ..... Apr. 23 e132
Pakistan rushing work on the Indus River's Kotri irrigation weir..May 14 *88
Platte River
North Platte irrigation and power plan drawn ..... Mar. 12 28
Platte River diversion scheme disputed by Nebraska (map)..Jan. 29 *22
Upper Platte system delivers water and power into Colorado, Wyoming and Nebraska ..... June 4 (F) *38
Techniques and trends in water supply and sanitation ..... Feb. 19 (F) *144
Weber Basin project started by beginning Gateway Tunnel work..Jan. 22 28
Irrigation see also Canals

J

Jetties—Tetrapod, jetty blocks, developed by French hydraulic laboratory ..... Jan. 8 (F) *32
Joint Construction Agency—New command post for military construction in France W. G. Bowman....June 11 (F) *33

K

Korea
United Nations launches reconstruction program under American engineering firm ..... May 7 *23

L

Labor

Atomic Energy Commission's Idaho project has strike ..... May 7 31
AEC Labor - Management Relations Panel headed by Ching ..... June 18 *31
AEC Labor Relations Panel reorganized ..... Mar. 19-29 Apr. 2 29
AEC Ohio strike ended by four-point plan ..... Feb. 5-30 Feb. 19 227
AEC Paducah, Ky., operating engineers' feud are aired ..... May 21 31
AEC Paducah teamsters end walkout ..... Feb. 5 30
AEC projects—wage increases (table) ..... Apr. 16 31
AEC strike ends at Savannah River plant ..... Feb. 26 29
AFL Building Trades Council maps reorganization of disputes board ..... Feb. 5 *29
AFL construction unions in Pittsburgh protest current unemployment practices ..... Mar. 12 30
AFL Council maps Taft-Hartley law changes ..... Feb. 19 228
AFL president asks that construction be exempted from Taft-Hartley Act ..... Mar. 5 *28
Akron carpenters form unit to negotiate wide contract ..... Jan. 15 32
Alabama strike settled ..... Apr. 30 29
Albany-Schenectady area have construction strikes ..... June 11 31
Alexandria, Va. housing contractor withdraws low bid harassed by labor troubles ..... Jan. 8 28
Allegheny County hospital operating engineers strike ..... May 7 31
Anti-union measures introduces in two states ..... Mar. 12 29
Arizona anti-picketing law upheld in first court test ..... Jan. 15 32
Arizona labor unions ask wage scale change ..... Apr. 23 31
Atomic-powered submarine dispute to be heard by NLRB ..... Mar. 26 31
Australian trade unions praise contractor ..... Apr. 30 29
Average hourly earnings (chart) Feb. 19 62
Back pay reversed, Youngstown, Ohio Jan. 22 81
Baltimore open shop employers attack city wage scale ..... Jan. 15 32
Baltimore strike ends ..... Apr. 30 29
Bill exempts construction from Taft-Hartley law ..... May 7 *28
California AGC declares voting time off abused ..... Apr. 9 31
California court rules welfare fund voluntary ..... May 21 28
California ironworkers go back to work ..... Apr. 16 31
California legislators map labor-control law ..... Feb. 5 29
California rejects right-to-work bill Mar. 29-31 June 4 29
Carpenters strike in Ohio is over Apr. 16 31
Cheatham Dam work halted by dispute Apr. 16 31
Cheyenne, Wyo. strike settled ..... May 7 31
Chicago painters reach an agreement June 11 28
Cleveland Home Builders Assn. separates from Building Trades Employers Assn. ..... May 21 63
Closed shop violations in Los Angeles ended by voluntary pact ..... Jan. 8 31
Collusion cases ..... Apr. 9 31
Communist identification ..... Apr. 16 32
Congress seeks to return power to the states ..... May 14 31
Construction firm fights North Carolina painters ..... Feb. 26 28
Construction firm's suit against United Mine Workers upheld ..... Apr. 30 28
Construction Industry Stabilization Commission has informal agreement with Wage Stabilization Committee on autonomy status ..... Jan. 29 31
Construction not to be exempted from Taft-Hartley law ..... May 28 28
Dallas ironworkers strike ..... Apr. 2 29
Davis-Bacon wage law under new attack in Senate ..... Mar. 19 30
Delaware strike ..... May 21 28
Detroit carpenters not settled ..... May 21 28
Detroit plasterers and masons accept package increase ..... June 4 29
Engineer-scientist groups disagree on wage bargaining ..... June 4 28
Engineers and Scientists of America activated ..... Jan. 15 31
Fair labor standards apply to "off-the-road" workers producing materials for interstate roads ..... Mar. 19 30
"Featherbedding" explained...Mar. 12 29
Federal court injunction stops second area boycott ..... Apr. 4 29
"Fire and rehire" injunction dismissed in Tennessee ..... Apr. 2 29
Fort Worth sheet metal workers stop work ..... Apr. 16 31
Hartford strikes end as bricklayers return ..... May 7 28
Idaho building strike ..... Apr. 16 31
Idaho job closure called off....Apr. 30 29
Indiana building work halted by disputes ..... Apr. 16 31
Indiana Ordnance Works strike settled ..... Mar. 26 29
Injunction hits contractor in open-shop dispute ..... Mar. 19 30
Iowa strike ..... May 14 28
Labor Secretary warns against government props ..... May 21 31
Licensing of construction equipment operators proposed ..... Jan. 22 32
Little Rock, Ark. plasterers reject pay rise ..... Apr. 9 31
Louisville, Ky., jurisdictional disputes at General Electric ..... May 7 28
Louisville, Ky., strike settled Apr. 16 31
Apr. 30 29
Machinery installation feud continues Jan. 29 31
Mason contractors need more journeymen masons ..... Mar. 5 28
Materials and labor prices Jan. 8-84 Feb. 5-97 Mar. 5-70 Apr. 9-74 May 7-72 June 4 103
Meany sees prosperous peace based on more construction ..... Apr. 30 28
Media, Pa., union members convicted of conspiracy ..... Feb. 5 30
Milwaukee contractor sues union for damages ..... Jan. 15 32
Minnesota strikes ..... May 14 28
Mobile, Ala., building trades strike Apr. 23 31
National Joint Bd. for the Settlement of Jurisdictional Disputes will be extended ..... Mar. 26 29
NLRB broadens meaning of secondary boycott ..... Jan. 8 31
NLRB chairman wants less power Mar. 5 *29
NLRB charges AFL Pittsburgh Building Trades Council with unfair practice ..... June 11 31
NLRB decision labeled Austin Co.'s firing of three guards to prevent a strike a Taft-Hartley violation Jan. 22 *32
NLRB upholds long pacts..... Feb. 26 28
National Constructors Assn. sees construction aided by ban of jurisdictional-strike picketing..... Jan. 22 24
National Industrial Relations Conference held in Cleveland..Jan. 22 (F) *29
Nevada has wage disputes with construction workers ..... June 11 28
Nevada union leaders fight "right to work" law ..... Jan. 22 31
New York City's Pier 57 deck stringers are awarded to dockbuilders Jan. 29 (F) *28
1952 strikes ..... Jan. 8 28
North California AGC to fight strike June 18 31
Northern California has wage disputes June 11 28
Oak Ridge slowed by operating engineers walkout ..... Feb. 5 30
Ohio Edison strike ..... Mar. 26 29
Ohio bricklayers strikes..... May 7 31
Ohio-Kentucky Regional Wage Board drives against overpay ..... Jan 1 26
Ohio plumbers fight licensing measure ..... Feb. 19 229
Oklahoma legislators kill "prevailing wages" on state highway jobs..Mar. 5 29
Old Hickory Dam dispute ends..Mar. 26 30
Omaha strike ends....Apr. 9-31 June 4 29
Operating engineers fined in Kentucky court ..... Mar. 26 30
Overtime-pay violations are the chief cause of construction penalties Feb. 12 29
Philadelphia heavy construction hampered by strike ..... May 14 28
Philadelphia operating engineers-union feud ..... Apr. 16 32
Philadelphia strike led by carpenters May 7 31
Philadelphia water meter installation dispute ..... Apr. 23 31
Phoenix, Ariz. solves master plumber controversy ..... Mar. 26 63
Picketing halted by temporary injunction at Nashville air base ...Feb. 12 30
Pittsburgh's Allegheny County wage rates at state hospital projects set Mar. 26 31
Pittsburgh construction workers end strike ..... Apr. 2 29
Pittsburgh painters strike..... May 7 31
Pittsburgh's Penn-Lincoln tunnel delayed by electricians' strikes..Apr. 16 32
Pittsburgh—Reinstatement of carpenters ..... Jan. 1 26
Portsmouth, Ohio; Cheshire, Ohio or Madison, Ind. A-plants may avoid labor pinch ..... Jan. 22 32
Price-wage controls to dwindle and die ..... Feb. 5 21
Proposed compensation benefits for workmen (table) ..... Feb. 19 226
Radford, Va. jurisdictional strike brings ultimatum to return. Feb. 5 30
Reynolds Metals Co.'s strike..Mar. 26 29
St. Louis AFL officials indicted June 4 28
St. Louis labor leaders indicted on charges of violating anti-racketeering law ..... June 11 31
St. Louis probe under way..... Apr. 16 32
Apr. 23-28 May 7 31
St. Louis truck drivers strike...May 28 28
San Diego homebuilders ask NLRB to force union to bargain..... May 21 28
Seattle and Tacoma operating engineers strike ..... Mar. 26 30
Secondary boycott? ..... Mar. 19 30
Secondary boycott ban on employers upheld by NLRB ..... Apr. 2 29
Senate Labor Committee report hits wage law enforcement ..... Feb. 26 28
Six-hour day in Canada?..... Jan. 8 31
Spain—hourly construction wage rates (tables) ..... May 14 40
State labor laws (table)..... May 14 31
State legislations enact labor laws June 11 31
Striker against TVA loses fight for wages ..... Jan. 22 32
Strikes continuing in Philadelphia, St. Louis, Wyoming and Delaware June 18 28
Supreme Court lowers fine in labor standards case Kansas City....Jan. 8 31
Syracuse painters end strike..Apr. 23 31
TVA wage agreement draws contractor fire ..... Mar. 19 29
Taft considers exempting consctruction from Taft-Hartley law..... Apr. 30 29
Taft-Hartley changes discussed before the House Labor Committee..Mar. 12 29
Taft-Hartley changes discussed before the Senate Committee with industry differing ..... Apr. 23 *28
Taft-Hartley debate before congressional committees ..... Apr. 2 *28
Taft-Hartley law amendment proposed by Rep. C. D. Kearns. June 18 *28
Taft-Hartley law changes proposed by the Administration ..... June 25 *29
Taft-Hartley law changes submitted by Taft ..... Jan. 29-25 Feb. 5 30

* Illustrated; -e, editorials; (F) Articles over a page

Tennessee building trade members strike ..... May 14 28
Tucson carpenters return to work Apr. 9 31
Two union men held in assault on agent ..... Jan. 1 26
Unions get set for spring bargaining Mar. 12 30
U. S. Bureau of Labor estimates more building, jobs in 1953 ..... Feb. 5 29
Utah projects shut down due to strike June 11 28
Virginia labor district appeals case lost to construction firm .... Feb. 12 30
Virginia's "right-to-work" law upheld by Supreme Court ..... Mar. 26 30
Wage boosts requested in two Ohio cities ..... Feb. 26 29
Wage controls ended ..... Feb. 12 29
Wage hike by TVA opposed by AGC contractors ..... Jan. 1 26
Wage increases of 1953—ENR reports (table) ..... June 4 30
Wage overpayments checked by Wage Stabilization Board ..... Jan. 15 32
Wage renegotiation needs care .. Feb. 19 *226
Wage rollback proposed at Norfolk, Va. Apr. 30 29
Wages and productivity ..... Apr. 2 e112
Washington bricklayers sign contract May 21 28
Washington State wage dispute slows state construction ..... Apr. 2 28
West Virginia Turnpike stopped by labor trouble ..... Mar. 26 31
Wilmington, Del. building construction strike ..... May 14 28
Wyoming ends job closure ..... Apr. 30 29
Youngstown, Ohio, carpenters return to work ..... Mar. 16-31 Apr. 16 31
Youngstown walkout ..... May 28 28

Lakes

Camp Pendleton, Calif. lake weeds removed by floating lawn mower May 14 *47
Great Lakes levels can be foretold by statistics Pierce & Vogt. Jan. 1 (F) *30
Study determines lake evaporation and tests new measurement methods Mar. 19 *71
Study of evaporation—corrections R. W. Davenport ..... May 14 6

Land Reclamation

Japan plans to reclaim land in Tokyo harbor with dredging ..... June 11 *54
Japan—reclaiming land from salt water bay ..... May 7 *60
Landslides—Grand Coulee menaced by landslides and a rising lake .... May 14 27

Legal Decisions

I. V. Werbin Jan. 1-47 Jan. 8-67 Jan. 15-90 Jan. 22-64 Jan. 29-62 Feb. 5-92 Feb. 19-214 Mar. 12-80 Mar. 26-36 Apr. 2-66 Apr. 9-83 Apr. 16-90 May 14-90 June 4-99 June 18 75
New York law prohibiting engineering practice by corporations under attack Mar. 12 (F) *21 bill withdrawn Mar. 26 24
Western Pennsylvania Sand & Gravel companies face contempt charges Apr. 30 27

Lights and Lighting

Ford Motor Co.'s Research Center features no-glare light .... June 4 (F) *33
How to compute daylighting in a room (charts) ..... Jan. 29 (F) *41
Portland, Ore., highway lighting June 4 *47

Locks

Lock opened on the Cumberland River Jan. 1 *24
Monongahela River lock progresses at Braddock, Pa. Jan. 29 *48

M

MacDonald, Thomas H. retires as Commissioner of Public Roads; Du Pont takes over ..... Apr. 2 (F) *52 Apr. 9 e128
Mashburn, Lloyd A. named Assistant Labor Secretary ..... Jan. 29 *31
McGraw-Hill surveys capital spending by U. S. business (chart) ..... Apr. 2 *86
Trane Co. laboratory to study weather "magic" ..... Jan. 1 37

Mines

Kaiser Steels plant and mine on the West Coast (picture feature) . May 28 *36
Taconite concentrating plant near Mountain Iron, Minn. .... Jan. 1 (F) *28
Mississippi River Commission—Gen. J. T. Harding becomes president ... June 4 24
Moeller, Rear Adm. Lewis N. retires to construction job ..... May 14 (F) *80
Moles—Annual awards presented Feb. 12 *25 e88
Monorail transportation studied by Los Angeles ..... May 7 53

Moving

Bridge moved to prevent flooding out, San Diego County, Calif. .... Jan. 15 *51
Missouri River bridge moved by tall towers on barges to new location June 11 *24
Moving sidewalk in Chicago's Museum of Science and Industry ..... Mar. 19 *48
Municipal problems see Cities, Planning

N

National Assn. of Home Builders Leaders see more progress in home-building techniques ..... Feb. 26 (F) *50
National Industrial Relations Conference held in Cleveland ..... Jan. 22 (F) *29
National Production Authority—Water and sewage projects approved .. Feb. 5 126
National Security Resources Board—report ..... Jan. 1 19
National Society of Professional Engineers—Oregon group votes against tie June 18 27
National Water Conservation Conference Feb. 19 46
New Jersey State Building Authority held invalid by Supreme Court ..... June 11 22
Niagara Falls—New regulatory works proposed ..... May 28 26
Noise—Portland, Ore. downtown garages create new noise problem ..... Apr. 2 47
North Atlantic Treaty Organization program ..... Apr. 30 22

O

Office of Price Stabilization—Decontrol of construction items lags behind hectic OPS moves ..... Mar. 12 22

Oil Refinery

India to build third oil refinery . May 14 92
South African refinery nears completion ..... Feb. 19 *200
Oil slicks sunk with carbonized sand Feb. 26 23
Oil wells supply Long Beach, Calif. with revenues for public works ..... Apr. 30 82

P

Pantograph not new D. W. Proebstel Mar. 5 15
Paper mills to be built abroad .. Mar. 26 87
Parking see Street traffic
Parks—Faulty work in Philadelphia playground prompts contractor rating plan ..... Mar. 26 60

Pavements

Airports
Coal-tar pavements containing rubber show promise for jet-plane runways ..... Mar. 5 42
Lake Charles Air Force base, La. (unit prices) ..... June 11 92
Lincoln, Neb. airfield pavement vibrated full-depth ..... June 18 *39
Los Angeles air base bids asked Feb. 26 23
Philippines—Coral and rock hydraulic fill for air base constructed by U. S. Seabees ..... June 11 56
Taxiway tried using coal tar-synthetic rubber binder ..... Apr. 23 26
Cincinnati doing its own blacktopping of streets ..... Mar. 12 64
Columbus cancels city street widening contract ..... Mar. 26 60
Crossett, Ark. converted dirt streets to soil-cement pavement, then added curbs and gutters ..... Apr. 16 (F) *57
Delaware darkens concrete pavement to reduce total paving outlay .. June 4 *60
Indiana builds its own test pavements Jan. 15 (F) *46
North Carolina legislation prepares two bills for street repair aid .... Mar. 19 50
Photography—The bore-hole camera—new aid for foundation men .... June 25 *39

Piles and Pile Driving

Deep-water piers are precast concrete, electric transmission tower, San Francisco ..... Mar. 5 (F) *30
Pile drivers used as compactors so loose sand would support building at Blythe, Calif. ..... June 25 *62
Portland, Ore. flexible pier has 200-ft pipe piles H. W. Hunt ... Jan. 29 (F) *32
Projectile piledriving to hold moving substratum of Detroit water supply station J. H. Thornley .. Mar. 19 (F) *33
San Francisco Bay wharf piles placed in drilled holes on steep slope . May 14 *48

Pipes and Pipelines

Algonquin Gas Transmission Co. ordered by court to remove pipeline from property ..... Jan. 22 22
American Concrete Pipe Assn. meeting considers outlook good for concrete pipe makers J. R. Carr ..... Mar. 5 23
California Electric Power Co. removes woodstave pipe, builds new line Feb. 5 *41
Canada — prestressed-concrete pipe failure halts job ..... Feb. 19 47
Canada—prestressed concrete pipe failure is attributed to wire corrosion May 7-24 R. M. Doull ..... Mar. 21 7
Clay pipe for air conditioning restaurants being built along the Pennsylvania Turnpike ..... Jan. 15 *45
Crude-oil pipelines get allocations Feb. 19 268
Fraser River, B. C. pipeline river crossing completed ..... Apr. 30 25
Honolulu—sub-surface trestle carries water main ..... Apr. 16 *55
Natural gas
Pipeline boom continues ..... Jan. 29 83
Rival Pacific Northwest pipeline plans heard ..... Mar. 19 27
Oil pipeline extension for Canada Apr. 16 48
Old wood pipe line found in Ohio Feb. 5 *91
Perforated pipe sumps solve drainage problem ..... Feb. 26 *47
Plastic pipe: what's its future? May 7 (F) *37
Plastic pipe curves ..... May 21 *51
San Francisco water lines completed (map) ..... Jan. 8 (F) *46
School piping insulated with Ultralite Jan. 1 *72
Vallejo, Calif. water pipeline awarded on novel cost basis May 21-104 H. L. Thackwell ..... June 18 10

Planning

Baltimore plan: is this the way to beat slums? ..... May 28 *49
Bi-State Development Agency moves for broader powers in Missouri and Illinois ..... Jan. 29 51
Boston syndicate buys rail yard to build center similar to Rockefeller Center ..... Mar. 5 (F) *45
Chicago gets new plan for redevelopment ..... Apr. 30 46
Cleveland's proposed multi-million dollar project to be on land sold by Pennsylvania RR. ..... June 4 (F) *48
"Cultural center" planned in Pittsburgh ..... Apr. 23 *49
Dallas annexes area of nine square miles ..... Jan. 15 55
Dallas planning three air-conditioned shopping centers ..... Feb. 12 (F) *44
Denver acts to cut costs of annexing developments ..... June 4 62
Denver passes zoning rule eliminating setback program ..... Feb. 5 55
Long Island industry construction developed by contractors and regional association Arnold Smith . May 14 (F) *62
Nashville, Tenn. fight brews over sale of federal land ..... June 4 53
Norfolk, Va. civic center planned Feb. 5 *50
Norfolk's 5-year plan ..... Feb. 19 225
Philadelphia's Penn Center contract let ..... June 4 65
Philadelphia plan for center similar to Rockefeller Center at Broad Street Station ..... Feb. 12 (F) *41
Pittsburgh redevelopment gets financial aid ..... June 4 65
St. Louis slum-clearing planned Feb. 19 (F) *224
Schenectady tryz to stop business trend to suburbs ..... Feb. 5 52
Stanford University plans shopping center, housing and industrial area Apr. 30 47
Toronto, Can. plans residential area outside city ..... May 21 (F) *49
Zoning
Rochester, N. Y. finds zoning blocks industrial growth ..... Mar. 5 23

Plastics

Building Officials Conference of America approves building code standards for plastics ..... Apr. 16 28
Plastic pipe: what's its future? May 7 (F) *37

• Illustrated; e, editorials; (F) Articles over a page

Ports and Harbors

Africa—Golds Coast port capacity doubled ..... June 4 *71
Boston port development will be helped by new deep-water terminal planned ..... Jan. 15 52
Brazil's ports need dredging.. Mar. 26 82
Dover, England, ferry slip: portals allow bridge to rise ..... June 4 *68
Houston port development plan assigned to engineers ..... Jan. 15 55
Houston port grows ..... Mar. 26 64
Israel pushes Haifa harbor work ..... Jan. 22 58
Japan—Tokyo Port improvement ..... Mar. 12 68
Pennsylvania bills proposed to create an Allegheny County and a Delaware River port groups ... Feb. 12 45
Port of New York Authority reports on revenues ..... Mar. 19 101
Port of New York Authority—use of bridge tolls ..... Mar. 26 e176
San Francisco plans port improvements ..... Apr. 30 47
Spain—U. S. port and naval facilities may be established on Cadiz Bay (map) ..... May 14 (F) *39
Venezuela—to open Lake Maracaibo to ocean traffic with dikes ... Apr. 16 88

Power and Power Plants

AEC power plant awards made to contractors in Ohio and in Indiana ..... Feb. 12 60
Alaska—Eklutna power availability may change city's plans ..... Jan. 22 50
California steam plants erected with outdoor construction ... June 4 (F) *41
Edison Electric Institute publishes survey of future power work ... June 11 102
Greece to double supply with four new plants ..... Mar. 5 59
India brings in first postwar power from Damodar Valley scheme—by steam ..... Feb. 19 199
Japan to build gas plant ... Apr. 16 88
Korea—reconstruction program undertaken by UN agency ..... May 7 23
Niagara Falls bill aimed to preserve scenic beauty ..... Feb. 5 23
Pacific Gas & Electric Co.'s Contra Costa plant ..... Mar. 12 *23
Seattle City Light Co.'s new Ross plant receives state safety order to prevent further loss of life ... Jan. 1 26
TVA budget cut ..... May 21 22
Will utility costs keep climbing in '53? ..... Apr. 2 *90

Public Works

Boston plans outlined for capital improvements ..... May 21 52
California legislature spurs planning on several multi-million dollar jobs ..... June 25 28
Long Beach, Calif. votes on public projects, has funds saved from oil revenues ..... Apr. 30 82
1954 construction budget (tables) ..... Jan. 15 (F) 21
Louisville, Ky. would use revenue bonds to help school ..... Mar. 19 103
School building controversy flares in state of Washington ... Jan. 22 (F) *79
School construction aided by Indiana court decision ..... Jan. 22 80
Schools in Kentucky, Spokane and Blacksburg, Va. get money for new buildings ..... Apr. 30 46
Schools—New York City changes designs to save construction costs ..... Mar. 26 (F) *38
Schools—state legislatures face heavy 1953 agenda ..... Jan. 8 24
State legislation of interest to engineers and contractors; New York, Washington, Wyoming, Utah, Idaho ..... Apr. 2 25
State office buildings considered by four states ..... Jan. 29 82
Toledo school overcrowding may be relieved by purchase of prefabricated steel buildings ..... Mar. 12 64
Washington legislators study school aid proposals ..... Feb. 5 125

R

Rail and Water Terminals

Boston port development will be helped by new deep-water terminal planned ..... Jan. 15 52
PRR barge terminal in Cincinnati ..... Feb. 5 23

Railway Terminals

Canton, Mass. to have new station ..... Mar. 19 51
Mobile, Ala. station to be built ..... June 11 48
New Haven Railroad opens freight distribution center in the Bronx, N.Y.C. ..... Feb. 12 *126
Pittsburgh starts trainshed ..... Feb. 5 48
Washington, D. C. terminal repaired by lumber ..... Jan. 29 23

R

Railways

African railroads planned ..... May 21 66
AREA convention hears need for planning ..... Mar. 26 25
Letchworth Village, N. Y. railroad tracks (unit prices) ..... June 25 77
New Haven Railroad stock fight over capital improvements may decide other roads programs ..... Feb. 12 *26
PRR—Enola Yards near Harrisburg in the early days W. H. Gray ... Mar. 12 11
Pennsylvania RR to sell plot in Cleveland ..... June 4 (F) *48
Spain's road and rail transport system W. G. Bowman ..... May 14 (F) *43
Venezuela to construct rail line branch ..... Feb. 5 66

Rainfall and Runoff

Arizona continues rain making efforts ..... Jan. 8 35
Arizona has rain aplenty; first time in decade ..... Jan. 29 37
California rainmaking experiments to continue ..... Feb. 12 24
Colorado River runoff down ... Mar. 5 27
Demands for rainmaking service seen increasing ..... Apr. 9 26
Great Lakes levels can be foretold by statistics Pierce & Vogt.. Jan. 1 *(F) *30
Rainmaking machines aid Washington State foresters ..... Feb. 5 91
Washington rainmakers would be controlled by bill ..... Apr. 16 52
Rapid transit—Cleveland rejects sole bid for rapid transit construction.. Feb. 5 125

Real Estate

Office occupancy rates and prevailing rentals in 10 cities (table) ... Mar. 19 25
Office space demand eases ... June 18 104
Reconstruction Finance Agency—Agency to expire in June 1954 ..... Apr. 2 88
Reed, Malcolm W. of U. S. Steel.. Jan. 1 *45
Reports need to be clearer ..... June 18 e132

Research

Concrete under impact studied in California ..... Feb. 5 84
For the future: J. F. Callery .. Apr. 23 10
Lehigh University to build world's largest testing machine ..... Feb. 5 *86
NBS Structural Laboratory studying concrete under impact ..... Feb. 5 84
Public Health Service builds itself the latest in lab buildings R. Raneri ..... June 18 *37

Reservoirs

Columbia River Basin projects near end of funds ..... Mar. 12 22
Hollwood and Safe Harbor, Pa. reservoirs still reclaimed for coal content ..... Apr 23 (F) *32
Washington, D. C. reinforced concrete clearwater basin built to be leakproof ..... May 21 (F) *42
Riprap—Asphaltic concrete and soil-cement tested as substitutes for riprap ..... Mar. 26 37

Rivers

Cuyahoga River, Cleveland, improvements program progresses through the years (map) ..... Jan. 22 *47
Green River, Ky. navigation improvements proposed ..... Mar. 5 27
Kansas River Basin—recommendations for channel and levee work.. June 18 25
Kansas River Basin survey report before the Kansas legislature (map) ..... Mar. 5 (F) 21
Kansas River flow-way plan discussed at AWWA convention A. J. Fox Jr. ..... May 21 (F) *23
Kansas River flow-way plan criticized by Army engineers ..... Apr. 23 26
Mississippi River—Chain of Rocks canal opened ..... Feb. 19 *47
Missouri Basin groups oppose halting Oahe and Tuttle Creek dam projects ..... Apr. 30 23
Missouri Basin Inter-Agency Committee tries conciliation of high vs low dam issue ..... Apr. 2 22
Missouri River Basin Commission proposed for development ..... Feb. 26 24
Missouri River Basin in state's rights furor ..... Mar. 5-22 Mar. 12 e132
Monongahela River lock progresses at Braddock, Pa. ..... Jan. 29 *48
Moselle River canalization considered ..... June 4 75
Niagara Falls regulatory works proposed to improve distribution of flow ..... May 28 26
North Platte River controversy among Colorado, Nebraska and Wyoming ended ..... June 4 22
Platte River diversion scheme disputed by Nebraska (map) ..... Jan. 29 *22
Sabine River waters may be split by Texas and Louisiana pact ..... Feb. 5 28
Techniques and trends in river use and control ..... Feb. 19 (F) *105
Tigris and Euphrates Rivers to be studied by American engineer. Apr. 30 *56

Rivets

Experience with riveting Richard Tench ..... Jan. 29 13
Here's a better way to design splices ..... Jan. 8 (F) *41

Roofs and Roofing

Arched Indian bungalow and Mexican gas station roof are unusual types of concrete arch ..... June 25 *57
Beamless, light-gage roof developed ..... Jan. 1 *25
Domes
Boston's planetarium dome.. Mar. 12 *31
Dome for Ford Rotunda, Dearborn, Mich. built on rotating jig.. May 28 31
Structure of MIT auditorium is supported at three points ..... May 7 *24
Perlite concrete roof cast on metal lath, Brecksville, Ohio ..... May 21 *45
Prestressed slabs to be erected by lift-slab method for San Antonio and Louisville buildings ..... Apr. 16 *39
Prestressed waffle-slab roof lifted in Louisville, Ky. ..... May 21 *27
Raleigh, N. C. arena has saddle-shape roof hung from pair of concrete arches that encircle building F. S. Merritt ..... Feb. 5 (F) *31
Roof top entrance from employee parking areas ..... June 18 *44
Warehouse roof prestressed ... Mar. 26 *27

S

Safety

Greenland-Thule construction sets safety record ..... Feb. 12 *30
Paducah, Ky. S-plant constructor gets safety commendation ..... Mar. 5 29
Safety order results from high fatalities in new Ross power plant of the Seattle City Light Co. ..... Jan. 1 26
Safety see also Highway Safety

Sanitation

Arabia's oil changes age-old sanitation conditions ..... Apr. 16 (F) *80
Baltimore plan: is this the way to beat slums ..... May 28 *49
Disaster relief plans by the U. S. Public Health Service ..... June 4 34
Inter-American Sanitary Engineering Congress held in Buenos Aires. Jan. 1 *43
Korean troops' health guarded by 12 sanitary engineers ..... Feb. 5 26
The sanitary engineer (charts) ..... Jan 8 (F) *44
Sanitary engineers group proposed ..... Feb. 12 28
Techniques and trends in water supply and sanitation ..... Feb. 19 (F) *144
Scientific census to be taken by government ..... May 7 68
Seabees celebrate 11th birthday ... Jan. 8 75
Seawalls see Shore protection
Seaways see Waterways

Sewage Treatment

Arabia's oil changes age-old sanitation conditions ..... Apr. 16 (F) *80
Batavia, N. Y. to receive state help for plant ..... Apr. 16 66
Cincinnati's Little Miami sewage works ..... June 25 (F) *40
Clarksville, Va.—federal government to build plant for the town ..... Feb. 12 28
Colmar, Pa. industrial plant gets deluxe sewage works ..... Feb. 5 *45
Copperas Cove, Tex. water and sewage works (unit prices) ..... May 14 144
Delaware mayors study sewage disposal ..... Jan. 22 48
Delaware regional sewerage project spreads constructors over variety of jobs ..... Jan. 15 (F) *40
Huntington, W. Va. ordered to build sewage disposal system ..... June 25 28
Indiana bill will help finance sewer improvements ..... Apr. 16 65
Louisville, Ky. sewer work halted by the state pending plans for treatment plant ..... Mar. 19 48
Miami, Fla. sewerage project awarded in five sections ..... Jan. 29 81
Miami sewerage plant attracts bids ..... Jan. 22 81
Nashville, Tenn. financing sewage plant ..... May 7 54
New York City
Bowery Bay Sewage Treatment Works Extension, Queens Incentive contract on tunnel job ... June 11 23

* Illustrated; e, editorials; (F) Articles over a page

Owls Head treatment plant shown in film ..... Apr. 2 49
North Charleston, W. Va. object to new sewage treatment plant ..... May 28 59
Ohio River Valley Water Sanitation Commission hearings on proposed sewage treatment standards for 300 mi. of Ohio River ..... Apr. 9 *23
Ohio villages balk at pollution control ..... June 18 (F) *46
Oxygen gas experiments made for sewage plants ..... Jan. 1 29
Penn Township, Pa. told plant is not a nuisance ..... Jan. 22 48
Pittsburgh studies how to drop sewage 90 ft vertically to tunnel interceptors L. M. Laushey ..... Mar. 5 (F) *38
Purdue conference reviews industrial waste treatment progress ..... May 14 23
Raritan River factions disagrees as upstream group's report is released ..... May 28 26
Raritan River, N. J. sewerage plant outlined for Somerset County (map) ..... June 11 *27
Rochester, Minn. sewage treatment plant completed ..... Mar. 26 *56
San Francisco's new sewage plant discussed at ASCE meeting ..... Mar. 12 23
Sewage award hit new highs ..... Mar. 19 101
Sewerage contracts run at record pace (map) ..... June 18 *107
Syracuse, N. Y. sewage treatment plant tanks kept from floating by permanent wallpoints ..... Mar. 26 *47
Techniques and trends in water supply and sanitation ..... Feb. 19 (F) *144
Toledo sewage plans ..... May 28 59
Washington State directs city of Kent to build disposal plant ..... Jan. 22 48
Youngstown, Ohio, at odds over treatment plant engineers ..... Apr. 16 66

Sewers

Arizona sewers flooded, air-conditioning hit ..... Apr. 2 48
Augusta, Ga. sewers (unit prices) ..... Apr. 30 77
Bond Brook-Raritan Bay sewer to be started soon ..... Jan. 8 104
Cincinnati contractor files suit for payment of "extras" ..... Jan. 8-103 Jan. 15 56
Cincinnati sewer syphon kept dry by coffer-dam O. A. Trippel ..... Mar. 19 32
Cincinnati sewer tunnel and hydraulic chambers (unit prices) ..... Jan. 29 76
Delaware regional sewerage project spreads constructors over variety of jobs ..... Jan. 15 *40
Denville, N. J. sewerage system (unit prices) ..... June 18 98
Euclid, Ohio, authorizes mining equipment to speed underground blasting ..... Apr. 2 50
Euclid, Ohio, city council stops contractor from blasting in sewer job ..... Jan. 29 50
Louisville reverses position on construction of sewer projects ..... May 28 59
Louisville, Ky. sewer work halted by the state pending plans for treatment plant ..... Mar. 19 48
Mexico City seeks drainage answers ..... Jan. 1 37
Montgomery, Ala. sewer charges held illegal ..... Apr. 16 62
New York City trunk sewer built under the Long Island Railroad C. B. Spencer ..... Feb. 12 (F) *31
Pennsylvania—Allegheny sewer contracts ..... Feb. 19 47
Perforated pipe sumps solve drainage problem ..... Feb. 26 *47
Pittsburgh studies how to drop sewage 90 ft vertically to tunnel interceptors L. M. Laushey ..... Mar. 5 (F) *38
Raritan River, N. J. sewerage plan outlined for Somerset County (map) ..... June 11 *27
Raritan truck sewer hung up on new snag ..... Apr. 9 23
St. Louis's public agencies seek legislative action ..... Jan. 29 51
Ships—Study of failures in welded ships provides new design criteria ..... Apr. 23 *64

Shopping Centers

Baltimore, Md. to have one-roof shopping center ..... Mar. 12 *57
Chicago to redevelop shopping centers ..... Apr. 30 46
Cleveland plans Meadowbrook center ..... Apr. 30 *43
Dallas planning three air-conditioned shopping centers ..... Feb. 12 (F) *44
Fort Lauderdale center ..... Jan. 29 *47
Houston plans shopping center ..... June 4 67
Miami shopping center started ..... Apr. 2 *44
Minneapolis and St. Paul to build four large shopping centers ..... Jan. 29 47
Princeton center under protection ..... Apr. 2 *44
San Francisco project features split-level design ..... Apr. 30 *43
Stanford University plans shopping center, etc ..... Apr. 30 47
Toronto, Can. plans residential area outside city ..... May 21 (F) *49

Shore Protection

Dike rebuilding in Netherlands poses great engineering problems (map) ..... Feb. 26 *48
Galveston seawall extension ..... Apr. 23 *42
Long Beach, Calif. land subsidence repairs mount into millions ..... Feb. 5 (F) *42
Ocean City, N. J. reclamation project washing out to sea ..... Feb. 5 53
Permeable seawall, Mass. (unit prices) ..... Jan. 22 74
Redondo Beach, Calif. battered by wild seas ..... Jan. 22 24
Virginia Beach, Va. sanding operations recommended ..... Mar. 5 27
Small Homes Council reports on residential construction and tornadoes ..... June 18 24

Smoke Abatement

Detroit region to study air pollution ..... Feb. 5 49
Los Angeles studies wind currents for smog solution ..... Apr. 16 47

Snow

Cleveland saves on snow that didn't fall ..... Mar. 26 64
German de-freezer for highways not fully tested ..... May 14 88
Michigan expands test of paper for snow fence ..... Apr. 16 *52

Soil Mechanics

Bay City, Mich. site for power plant dewatered by electro-osmosis method ..... Apr. 30 (F) *36
Bigger soil-tests plate permits bigger pressures under footings, N. Y. C. Elmhurst Hospital ..... Apr. 16 *51
Mexico City seeks drainage answers ..... Jan. 1 37
More soil-test data wanted G. P. Tschebotarioff ..... June 4 10
Mystery of the restless substratum of the Detroit water supply station J. H. Thornley ..... Mar. 19 (F) *33
Permanent freezing of soil embankments for Siberian dam and hydro station ..... May 7 58
Post-soil-test rulings Jacob Feld ..... May 7 10
Seismic science service to aid New York builders ..... Feb. 12 32
Stabilizing wet soil with electro-osmosis B. J. Pugh ..... June 18 12
Textbooks on soil wrong? G. P. Tschebotarioff ..... June 25 13
Vector solution of soil pressures W. D. Bigler ..... Apr. 16 (F) *110
Southern California Professional Engineering Assn. Declines affiliation with Engineers and Scientists of America ..... Apr. 16 22
Southern Municipal & Industrial Wastes Conference ..... Mar. 26 26

Spain

Climate is dry and hot; road and rail transport system W. G. Bowman ..... May 14 (F) *43
Next stop for U. S. airbase builders? W. G. Bowman ..... May 14 (F) *33
Roman monuments in Spain ..... May 14 *35
Specifications—Better specifications, lower cost ..... Apr 9 e128

Stadiums

Canada—prestressed concrete used in sports arena projects ..... June 4 (F) *25
Los Angeles municipal auditorium fails to carry elections ..... June 11 47
Mexico's new Olympic sports stadium missing 40,000 seats ..... Apr. 2 *39
Olympic stadium planning in Australia ..... Jan. 29 57
Raleigh, N. C. arena has saddle-shape roof hung from pair of concrete arches that encircle building F. S. Merritt ..... Feb. 5 (F) *31
Raleigh, N. C. livestock pavilion—is Coliseum too elaborate? R. W. Powell ..... Mar. 19-11 design explained F. N. Severud ..... Mar. 26 10
Rome's new stadium is opened ..... Mar. 5 *37
Stair hand rail designed for simple fabrication G. H. Klein ..... Mar. 26 *90

Steel

British steel plant grows despite uncertainties ..... Jan. 8-60 Jan. 15 76
DPA uneasy about steel capacity ..... Feb. 5 25
Europe's steel production up ..... Feb. 5 66
Fabricated steel bookings hit peak ..... June 4 152
Kaiser Steel's Fontana, Calif. plant and mine (picture feature) ..... May 28 *36
NPA starts new year without backlog; fills second-quarter steel needs Jan. 22 25
Raise steel limitations to aid highway work ..... Jan. 22 25
Steel misuse charged by NPA ..... Feb. 19 268
Structural steel allotment—first and second quarter 1953 (table) ..... Jan. 8 23
Welder-steel warehouse beams bent by flames and flames correct the deflection ..... Mar. 12 *34 e132
Stone & Weber Engineering Corp.—how it's set up J. P. Chamberlain ..... May 21 (F) *59
Store Modernization Institute runs a show ..... June 18 *106

Street Traffic

Baltimore to try new traffic systems—four-way stop intersection control ..... June 11 (F) *45
"Barnes Dance" tried in different cities—four-way stop intersection control ..... June 11 (F) *45
Bold stripes mark crosswalks at dangerous corners ..... June 11 *45
Buffalo traffic flow problems to be helped by Niagara Thruway C. R. Waters ..... Mar. 19 (F) *41

Parking

Atlanta, Ga. underground parking garage may be built ..... Feb. 26 43
Baltimore to build garage in downtown area ..... Apr. 23 49
Canton, Ohio, to finance off-street parking ..... June 18 50
Chicago awards contract for first underground garage ..... Feb. 5 48
Chicago building underground parking garage ..... Feb. 26 *43
Chicago bus terminal loads underground ..... Apr. 9 (F) *41
Chicago digs for underground garage ..... Apr. 2 *48
Cincinnati officials discuss four different proposals for parking facilities ..... Feb. 26 43
Cleveland to have garage under the Mall ..... Apr. 23 51
Columbus, Ohio, department store constructing multi-level garage ..... June 18 50
Columbus municipal garage planned ..... Feb. 5 48
Dallas department store suggests over the street parking ..... June 18 49
Dallas to build drive-in bank combined with parking garage ..... Apr. 23 *52
Denver plans two city-operated garages ..... Feb. 5 48
Denver to build off-street parking structure ..... June 18 50
Great Britain—underground garages proposed for London ..... Apr. 2 43
Jacksonville, Fla. bond validated for off-street parking garage ..... Feb. 26 43
Kansas City, Mo. parking garage and plaza proposed ..... Feb. 26 43
Memphis to build underground parking garage ..... June 18 49
Milwaukee council passes off-street parking bill ..... Mar. 12 60
Milwaukee parking law arouses opposition ..... Mar. 19 46
Milwaukee to buy lot for garage ..... Apr. 23 51
Nashville, Tenn. may revise building code to require new buildings to provide off-street parking ..... Feb. 5 48
New Haven-owned parking facilities upheld by Connecticut Court ..... June 18 24
New York City's alternate-side-of-the-street parking cuts cost of street cleaning ..... Mar. 26 55
Oakland, Calif. parking garage to be built ..... Feb. 26 43
Pasadena, Calif. finds parallel street parking satisfactory ..... Jan. 22 52
Philadelphia to construct parking garage although it will compete with private garage ..... Feb. 5 46
Pittsburgh parking garage auto servicing halted ..... Mar. 26 56
Pittsburgh plans for four garages await appeal ..... Feb. 5 48
Roof top entrance to factory from employee parking areas ..... Jan. 18 *44
St. Louis plans seven square block garages ..... Feb. 5 46
San Francisco to have six-story garage ..... Apr. 23 49
Waco, Tex. rebuilding after tornado, to park on roof areas of new buildings ..... June 18 49
Parking see also Garages

Structural Design

Beamless, light-gage roof developed ..... Jan. 1 *25
Canadian engineers review progress in prestressed concrete construction ..... June 4 (F) *25
Continuous-beam design variation George Winter Apr. 30 10 R. W. Waterhouse ..... June 11 10
Continuous-beam design variation cuts frame cost in Fairbanks, Alaska, warehouse R. W. Waterhouse ..... Mar. 26 *45
Formula for tapered timber columns E. I. Fiesenheiser ..... Mar. 26 *90
Lehigh University to build world's largest testing machine ..... Feb. 5 *86
Splices—here's a better way to design splices ..... Jan. 8 (F) *41
Sturgis, Maj. Gen. Samuel O. new Chief of Engineers ..... Apr. 16 *71

* Illustrated; e, editorials; (F) Articles over a page

Subsidence

Long Beach, Calif. land subsidence repairs mount into millions..Feb. 5 (F) *42
Subsidence problem is widespread ..Feb. 5 43

Subways

Canada
Toronto subway's progress...Mar. 5 *25
Cleveland subway plan revived again May 7 52
New York City
Queen's subway connection to be double-track A. C. Maevis Apr. 23 (F) *38
Subway shuttle—proposal to replace with conveyor.....May 7 *47
Philadelphia
Locust Street subway starts at last Mar. 19 45
Market Street subway extension (unit prices).....Feb. 26 54
Surveys and surveying—New scribing methods may replace drafting in preparation of maps.....Apr. 16 27
Swimming pools—Atlanta, Ga. swimming pool and bath house (unit prices) Apr. 16 *150

T

Tanks and Standpipes

Oiling fuel tank foundations with a rotating spray bar S. G. Feldman ..Apr. 2 *64
Thermostats show level of asphalt ..Jan. 8 *64

Taxation

California contractors get tax relief Feb. 5 124
Federal automotive tax receipts Feb. 26 24
New York City has problem trying to meet new budget.....Apr. 23 56
President asks Congress for study of state aid policies, revenue sharing Apr. 2 22
Tin can salvage in Phoenix, Ariz. Mar. 19 51
Tornadoes see Wind Storms
Towers—Electric transmission towers, San Francisco, deep-water piers are precast concrete.....Mar. 5 (F) *30

Transportation

New York City has problem trying to meet new budget.....Apr. 23 56
New York City's Transit Authority retains two engineering firms..May 21 24
Trucks—Western Germany—trucks move boats .....Mar. 26 *84
Trusses—London hangar has space trusses of reinforced concrete—triangular in cross-section....May 28 (F) *68
Tudor, Ralph named Undersecretary of Interior .....Feb. 5 *24

Tunnels

Australia's Snowy Mountains project—tunnel to be made from Adaminaby Reservoir to Tumut Point W. A. Dexheimer (map).....Feb. 5 (F) *58
Canada
Aluminum Co.'s hydro project-tunneling mark set.....Mar. 12 27
Cuba-Havana's auto tunnel nearing completion .....Jan. 22 (F) *55
Gateway Tunnel, Utah, work started Jan. 22 28
Hampton Roads tunnel-bridge alternate route proposed.....Feb. 26 46
Hampton Roads, Va. tunnel recommended .....Mar. 12 64
Japan—Honshu to Kyushu Island—third longest vehicular tunnel June 18 (F) *54
Los Angeles Airport has highway tunnels under runways.....Jan. 8 *54
Mont Blanc tunnel to be constructed between France and Italy ...May 14 92
New Orleans vehicular tunnel under Intracoastal Canal design work started .....Apr. 30 44
New York City
Bowery Bay Sewage Treatment Works Extension, Queens Incentive contract on tunnel job June 11 23
Delaware tunnel holed through for water supply.....Mar. 19 27
East Delaware Tunnel—tunneling techniques .....Mar. 26 (F) *32
Lincoln Tunnel—improved lighting subject of test in tunnel...June 4 62
Lincoln Tunnel's third tube demolition work started.....Apr. 16 66
Lincoln Tunnel's third tube fought by Weehawken, N. J...June 25 (F) *46
Palisades Dam, Idaho, templet of tunnel segment.....May 28 *39
Pantograph not new D. W. Proebstel Mar. 5 15
Pittsburgh studies how to drop sewage 90 ft vertically to tunnel interceptors L. M. Laushey.....Mar. 5 (F) *38
Providence RR tunnel studied as possible highway.....May 7 54
Salute to James Forgie.....June 11 e128
San Diego-Coronado, Calif. tunnel to be put to straw vote.....Jan. 8 49
San Francisco Broadway Tunnel ventilation R. G. Wadsworth....Jan. 29 13
Seattle—unit ventilation cuts tunnel costs .....May 7 (F) *43
Sweden—subway tunnel excavated after it is built.....May 21 (F) *65

U

Unit prices..Jan. 1-56 Jan. 15-130 Jan. 22-74 Jan. 29-76 Feb. 12-59 Feb. 26-54 Mar. 19-99 Mar. 26-142 Apr. 16-150 Apr. 23-98 Apr. 30-77 May 7-72 May 14-144 May 21-82 May 29-70 June 11-92 June 18-98 June 25 77

U. S. Army Engineers

General Sturgis is the new chief Apr. 16 *71

U. S. Bureau of Reclamation
Actions on Reclamation's construction budget .....Apr. 30 (F) 21
Engineer misquoted Grant Bloodgood May 14 6
Engineers face personnel cut...May 14 22
Engineers get assignments in Middle East rehabilitation plan....Apr. 30 56
New water and power projects in doubt Feb. 12 22
U. S. business.....Mar. 19 100
U. S. Census Bureau
California highway planning survey aided by Census Bureau interviews Mar. 26 *43

U. S. Dept. of Interior

Assistant Interior Secretaries named Feb. 12 23
Department is reorganized....May 21 26
New administration takes a look at problems .....Feb. 26 27

V

Value, Burnside R. elected president of New York Assn. of Consulting Engineers .....Feb. 5 *70
Vetter, Carl P. to work in Iraq..Apr. 30 *56

W

Walls

Aluminum-faced sandwich walls at Laon, France.....June 11 *36
Masonry cracking may be caused by magnesium oxide in mortar...May 7 34
Popcorn concrete walls at Chaumont, France .....June 11 *36
Pumping foam concrete into wall forms for small house panels..Apr. 23 (F) *47
Sandwich wall panels of precast concrete and cellular glass for small houses .....Apr. 23 (F) *46
Tilt-up lift-slab job speeded by fork-lift truck.....May 14 *44
Vector solution of soil pressures W. D. Bigler .....Apr. 16 (F) *110

Warehouses

Lodi, Calif. warehouse collapse investigated .....May 28 *25
Long Beach warehouse has prestressed girders .....June 11 (F) *41

Wastes, Industrial

Acid mine wastes to end.....Feb. 12 24
Cincinnati's Little Miami sewage works shows way in Ohio River clean-up June 25 (F) *40
Federation of Sewage & Industrial Wastes Assn. wants to build up research .....Apr. 9 44
Missouri River Basin states need waste treatment facilities.....May 28 22
Nashville, Tenn. industries correcting stream pollution.....June 18 44
Purdue conference reviews industrial waste treatment progress....May 14 23
Techniques and trends in water supply and sanitation.....Feb. 19 (F) *144
Virginia industries take action on pollution .....June 11 22
Water mains — Honolulu — sub-surface trestle carries water mains..Apr. 16 *55
Water meters—Philadelphia water meter installation dispute.....Apr. 23 31

Water Pollution

Cincinnati's Little Miami sewage works shows way in Ohio River clean-up June 25 (F) *40
Connecticut clean-up plans.....Jan. 8 53
Houston, Tex. worried over pollution threat to new water supply reservoir Mar. 19 50
Kingsport, Tenn. water quality improved since closure of Boone Dam Feb. 19 225
Missouri River Basin states need waste treatment facilities.....May 28 22
Nashville, Tenn. industries correcting stream pollution.....June 18 44
New York City pollution slowed by low pay for its engineers.....May 14 85
Ohio changes water-pollution control policy .....Mar. 5 25
Ohio firm charged with stream pollution referred to grand jury..Feb. 26 46
Ohio River Valley Water Sanitation Commission hearings on proposed sewage treatment standards for 300 mi. of Ohio River.....Apr. 9 *23
Ohio villages balk at pollution control June 18 (F) *46
Pennsylvania asks court to back pollution law.....Feb. 5 28
Pennsylvania state water clean-up campaigns continue.....Jan. 8 50
Raritan River factions disagree as upstream group's report is released May 28 26
San Diego Bay reported contaminated Feb. 5 49
State legislatures face heavy 1953 agenda.....Jan. 8 24
Tennessee River system pollution is increasing .....Feb. 5 24
Water becoming prime problem in industrialization of Southwest..Mar. 26 26
West Virginia commission gets tough about pollution.....June 25 28
Wisconsin court upholds anti-pollution order to Superior.....Feb. 12 43
Water pollution see also Wastes, Industrial

Water Resources

Colorado's water resources to be surveyed .....Apr. 16 22
Missouri Basin Commission proposed to develop water resource projects Feb. 26 24
Missouri Basin development...Mar. 12 e132
Missouri Basin in states' rights furor Mar. 5 22 Mar. 12 e132
Missouri Basin Inter-Agency Committee tries conciliation of high vs low dam issue.....Apr. 2 22
Nation's leading water-resources will meet in St. Louis.....Feb. 5 22
New regulations governing water resource development projects are available .....Feb. 5 25
New water-resource policy taking shape May 7 e128
Recommendations for changes in U. S. water policy.....Jan. 29 **26**

Water Rights

Arizona's claims to water under Colorado River pact answered by California .....May 28 24
Arizona legislators counter court ruling by halting well drilling.....Mar. 26 28
Fallbrook case over water rights near Camp Pendleton....Jan. 15 ;5 Feb. 5 23
Nebraskans gird for new battle over Platte River diversion scheme (map) Jan. 29 *22
North Platte River controversy among Colorado, Nebraska and Wyoming ended .....June 4 22
Platte River diversion scheme disputed by Nebraska (map).....Jan. 29 *22
Sabine River waters may be split by Texas and Louisiana pact.....Feb. 5 28
States must approve water diversion despite power act says Court of Appeals .....Jan. 15 25
Utah legislature enacts new ground-water code .....Mar. 26 28

Water Supply

Arizona legislators counter court ruling by halting well drilling.....Mar. 26 28
Arizona's use of ground water depleting water table.....Feb. 12 32
California's water districts may be consolidated .....Jan. 15 138
Cleveland estimates cost to improve water system .....Mar. 19 51
Colorado's water resources to be surveyed .....Apr. 16 22
Columbia River Basin waters development studied by British Columbia group .....Feb. 12 32
Dallas looks to new water sources as present supply is termed critical (map) .....Mar. 5 (F) 46
Dallas rains solve water shortage problem .....May 14 73

• Illustrated; e, editorials; (F) Articles over a page

Dallas water shortage surveyed by engineers ..... Jan. 8 53
Denver water department dam design change saves $40,000 ..... Apr. 30 26
Detroit water study finally gets under way ..... June 18 48
Evaporation studied by government research project ..... Feb. 5 28
Fort Myers, Fla. votes to finance water system ..... Apr. 2 50
Ground water supplies said unaffected by cooling water ..... Mar. 26 43
Houston, Tex. plan to increase water supply ..... Mar. 12 61
India-Karachi supply boosted with floating pump station ..... June 11 53
Interstate Commission Delaware River Basin (Incodel)
Compromise solution sought .. Mar. 12 27
Countered by consultants (maps) ..... Feb. 19 *48 Feb. 26 e88
Denounces Pennsylvania plan .. Mar. 5 24
Pennsylvania's rejection stirs demand for probe Feb. 12 21 Feb. 26 26
Pennsylvania report out citing objections ..... Mar. 26 26
Pennsylvania to decide on pact Jan 8 24 Jan 15 28 Jan. 29 26
Japan—aqueduct spans valleys with Yokohama water ..... Mar. 19 (F) *53
Montgomery County, Pa. to conserve underground water supplies .. May 28 59
New waterworks tool—TV .... May 14 e180
New York City
Delaware River water supply release formula will give more water to the city (map) ..... June 25 *27
Delaware water supply tunnel holed through ..... Mar. 19 27
East Delaware Tunnel—tunneling techniques ..... Mar. 26 (F) *32
Oklahoma City calls off bond election to supply water ..... May 7 48
Perikomen Dam, Pa. site defended by water company ..... Jan. 22 52
Philadelphia water—gagging on water ends ..... Jan. 29 50
Pittsburgh debates water authority May 7 47
Prosser, Wash. water system improvements (unit prices) ..... Mar. 26 142
Rapid City, S. D. to build earth-fill dam to provide storage for water supply (unit prices) ..... Jan. 1 56
Salt water barrier engineering study asked by San Francisco ..... Mar. 26 27
San Francisco water lines completed (map) ..... Jan. 8 (F) *46
Survey of industrial water supply costs Richard Hazen (charts, maps, table) Feb. 26 (F) *30
Techniques and trends in water supply and sanitation ..... Feb. 19 (F) *144
Upper Platte system delivers water and power into Colorado, Wyoming and Nebraska ..... June 4 (F) *38
Utah legislature enacts new groundwater code ..... Mar. 26 28
Waterworks contracts in four months of 1953 (chart) ..... May 7 21
Yadkin River, N. C. federal land sale delayed ..... Mar. 19 45

Water Treatment

Fluoridation charges ..... Mar. 12 64
Fluoridation gets high endorsement May 7 27
French explore sea depths for power and fresh water ..... Mar. 12 (F) *38
Logansport, Ind. waterworks Pt 1 (unit prices) ..... May 21 82
Pt 2 (unit prices) ..... May 28 71
Micro-straining-filtration through fine wire cloth proves its worth in England A. W. Consoer ..... Apr. 9 (F) *36
Nashville and Davidson County, Tenn. drinking fluoridated water .... May 7 48
Packaged waterworks pays off in Alexandria, Va. ..... Jan. 1 (F) *33
Philadelphia to add fluorides to its water ..... Apr. 16 62
Sea water distillation in Arabia Apr. 16 80
Survey of industrial water supply costs Richard Hazen (charts, maps, table) Feb. 26 (F) *30
Techniques and trends in water supply and sanitation ..... Feb. 19 (F) *144
Virginia industries take action on pollution ..... June 11 22
Washington, D. C.—Reinforced concrete clear-water basin built to be leakproof ..... May 21 (F) *42
Winnipeg, Can. reports micro-straining not justified ..... May 7 54
Yuma, Ariz. treatment plant started Feb. 12 45

Waterways

St. Lawrence Seaway
Bill stays alive ..... May 28 22
Bill to establish Seaway Development Corp. as a private group Feb. 5 23
Lift the ships E. R. Hallett Jr. Feb. 12 12
N. Y. State plan for power development favored by FPC examiner May 21 26
Prospects brighter ..... June 4 e180
Techniques and trends in transportation ..... Feb. 19 (F) *120
Webb, Del E.—contractor to build and own seventh largest city in Arizona Jan. 15 (F) *59

Welding

Early welded buildings E. P. Mellon II Feb. 5 10
France—Rouen bridge utilizes welded box girders ..... Mar. 12 (F) *42
Steel ball welded is atomic submarine laboratory ..... Apr. 9 (F) *32
sphere foundation D. A. Werblin Apr. 9 (F) *33
Study of failures in welded ships provide new design criteria ..... Apr. 23 *64

Wellpoints

El Salvador suspension bridge anchorage excavation aided by wellpoints B. J. Prugh ..... May 21 (F) *39
Sphere for atomic submarine laboratory placed on quaky soil drained by wellpoints D. A. Werblin ..... Apr. 9 (F) *33
Stabilizing wet soil with electro-osmosis B. J. Prugh ..... June 18 12
Syracuse, N. Y. sewage treatment plant tanks kept from floating by permanent wellpoints ..... Mar. 26 *47

Wells

Arizona legislators counter court ruling by halting well drilling ..... Mar. 26 28
India to drill irrigation wells .. Mar. 26 87
Soap Lake Protective Works, Ephrata, Washington (unit prices) .... Jan. 22 74
Wells for flood storage F. D. Steiner Mar. 26 10

Wharves and Docks

Dover, England, ferry slip unaffected by high tides ..... June 4 *68
Guatemala planning two more ports Jan. 22 58
New Orleans banana wharf opened Jan. 15 55
New York City
Pier 57's deck stringer are awarded to dockbuilders ..... Jan. 29 (F) *28
Portland, Ore. flexible pier has 200-ft pipe piles H. W. Hunt ... Jan. 29 (F) *32
Safe Harbor wharf built on sheetpile cells located on rock and filled with heavy pervious material J. H. Patterson ..... Apr. 23 *36
San Francisco Bay wharfs piles placed in drilled holes on steep slope May 14 *48
White Engineering Corp. J. G. completes executive change ..... June 18 *60

Wind Storms

Cleveland's loss from tornado .. June 18 *23
Experience with tornadoes H. G. Gerdes June 25 15
Flint, Mich. suburb suffers from tornado ..... June 18 23
Lessons taught by tornadoes .. June 25 e108
Waco, Tex. tornado damages old structures ..... May 28 25
Worcester tornado deals heavy damage to all but rigid frame construction F. S. Merritt ..... June 18 (F) *21

Wind Tunnels

Tullahoma, Tenn. giant rotor being placed in wind tunnel ..... June 25 *30
Tullahoma, Tenn. supersonic test center for Air Force ..... Apr. 20 (F) *30
Tullahoma, Tenn. test center's wind tunnel's motors placed ..... June 11 26
Wire rope—Why not follow the maker's recommendations? L. C. Torrell Jan. 29 (F) *38